

READINGS IN CHILD-CENTRED EDUCATION

**Papers Presented
at
National Symposium on Child-Centred Education**

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Volume - II



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F O R E W O R D

This Volume on Readings in Child-Centred Education is a compilation of papers contributed by eminent scholars and academicians, teachers and teacher educators, educational planners and administrators, psychologists and pedagogists, social workers and opinion-leaders, for a 'National Symposium on Child-Centred Education - Different Approaches including Behavioural Approach'. This Symposium has been organised by the National Council of Educational Research and Training, New Delhi to elaborate and illustrate the implications of the specific recommendations of the National Policy of Education, 1986 and Programme of Action, on child-centred and activity-based education.

The Department of Educational Psychology, Counselling and Guidance (DEPC&G) of the NCERT, which is mainly concerned with educational psychology applied to teaching and learning, counselling and guidance, was assigned the task of organising this Symposium. As most of the scholarly theories and principles on child-centred education were found to be of little direct relevance to the Indian classroom setting and socio-economic context, DEPC&G decided to invite well-known scholars, academicians, administrators and social-workers to contribute papers on this theme. We received a very good response to our invitations. Of the seventy-nine papers received so far, forty papers have been included in the Volume I. The remaining 39 papers are included in this Volume.

I hope the messages contained in these papers will provide an indication of the nature of concrete action which will be needed to implement the directions of the National Policy of Education, 1986 on child-centred and activity-based education. It is hoped that these papers will provide the requisite background for formulating the preparatory work needed for implementing the policy on a country-wide basis. I would like to stress that the concrete plan of action and directions related to the policy on child-centred education will necessarily emerge from the discussions in the Symposium based on critical examination of the content and messages underlying these scholarly papers.

The papers contained in this volume are somewhat varied and diverse in nature although all are related in one way or the other to the central theme. The papers relate to varied topics like:

1. Child-centred and activity-based education, meaning, problems and perspectives.
2. The cognitive, affective and personality pre-dispositions of the learner and the enabling factors that influence achievement and curriculum transactions.
3. Re-structuring of the curricula and instructional material to facilitate child-centred and activity-based education.
4. Sequencing and best methods of presenting the body of knowledge and skills, educational technology, including computer-based learning and teaching.

(iii)

5. The reinforcement mechanisms necessary to ensure continued and sustained interest of the learner.
6. Re-structuring of evaluation system for child-centred criterion-based performance.
7. Implications for parallel changes in teacher-training programmes, educational planning and administration.
8. Parental and community involvement to improve attainment of children.
9. Use of behavioural ecology in classroom management and
10. Teacher as facilitator of learning, freedom to learners and the personal and attitudinal relationship between the facilitator and the learner.

I wish to place on record my gratitude to the contributors who wrote papers and/or agreed to participate in the National Symposium. It is hoped that the participating experts will find value in going through these papers and they would make their deliberations more thematic, concrete and action-oriented.

I am thankful to my colleagues in the Department of Educational Psychology, Counselling and Guidance, NCERT, New Delhi who have brought out this volume and who are pre-occupied in organizing this National Symposium.

October 10, 1988

P.L. Malhotra
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P R E F A C E

With the need for significant changes in our elementary and secondary schools; clearly documented in the National Policy of Education (NPE) - 1986 and Programme of Action (POA), we have to develop and implement a diverse collection of alternative educational programmes that seek to improve the quality of education by individualising instruction. It has been noted in NPE, 1986 that " a child-centred and activity-based process of learning should be adopted..... Learners should be allowed to set their own pace and be given supplementary remedial instruction Children with special talent or aptitude should be provided opportunities to proceed at a faster pace". It has been noted in POA (1986) that " Curriculum methodologies of learning have to be vastly modified to bring in, particularly, elements of problem-solving; creativity and relevance..... The tools for the psycho-educational assessment and identification of learning problems should be undertaken".

In recent years much has been said and written about child-centred teaching and learning. However, it was felt that many of educational and psychological theories of intellectual development have not given adequate prescriptive models for assisting learning and intellectual development in class-room setting. To develop prescriptive theories; it requires much more clarity, confidence and conviction that we have something positive to say about learning and teaching will improve levels of performance, and this is the direction in which we shall have to move so that education will become more individualised; child-centred, diagnostic and prescriptive. Learning will then become more clearly directed towards greater self-sufficiency in the learner.

The history of the learner, home influences, early childhood experiences, early schooling, life experiences and expectancies will be examined more closely for its contribution to later learning. We shall have to develop theories or models of child-centred instruction and individualised learning that will be prescriptive in nature and geared to individual needs, resources and pace of development.

The Department of Educational Psychology, Counselling and Guidance of the National Council of Educational Research and Training (NCERT) has been concerned with evolving educational programmes which are maximally adaptive to the requirements of the individual learner. This National level Symposium on 'Child Centred Education - Different Approaches including Behavioural Approach' has been organised for teachers; psychologists, educational planners, educational administrators and allied professional groups to elaborate implications of the specific statements contained in the NPE and POA, 1986 specially related to child-centred and activity-based education and develop a concrete plan of action to evolve and implement desirable changes in classroom practices. A number of eminent educationists have contributed research and developmental papers on different aspects of child-centred education. These papers, it is hoped, will provide an indication of the nature of action which will be needed in order to implement child-centred and activity-based process of learning in our schools. Forty such papers have been included in Volume I. Thirty nine papers have been included in this Volume.

It is hoped that the papers in these volumes on child-centred education will be found to be useful particularly in the context of providing right kind of perspective to our efforts to individualise instruction and enforce child-centred education in our school system. We hope that scholarly and erudite contributions of eminent educationists and participants in this National Symposium will provide, through their deliberations, the initial thrust and leadership to launch the movement of child-centred education and individualised instruction throughout the length and breadth of our country. Surely, at a time when the country is giving highest priority to the educational and human resource development, the message underlying these papers will be found to be very useful. I would like to place on record my appreciation of the work done in this regard by the faculty members and secretarial staff of the Department of Educational Psychology, Counselling and Guidance of the NCERT.

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October 10, 1988 .

C O N T E N T S

1.	Concept Development, Diagnostic Testing and Remedial Teaching for Child-Centred Education	1
	- K. Venkatasubramanian	
2.	Criterion Referenced Testing in the Context of Child-Centred Education: Some Statistical Problems in Making Instructional Decisions	10
	- R.K. Mathur	
3.	Nurturing Affective Inputs of Pupil's Personality - Implications for Teachers	32
	- Swadesh Mohan	
4.	Developing National Identity in Indian Children	62
	- A.K. Singh	
5.	Many Sides of Child Centred Education	89
	- Rais Ahmed	
6.	Education - An Activity	93
	- M.N. Kapur	
7.	Child-Centred Education: Some Perspectives	114
	- Iqbal Narain and Arun P. Bali	
8.	Towards Education for Nurturing Creative Potential Among Children	127
	- Sushma Gulati	

9.	Child Centred Education: Is It Feasible	147
	- T.N. Dhar	
10.	Need and Nature of Emotional Education for Children: A Rational Emotive Approach	172
	- C.G. Pande	
11.	Psychology of the Child and the Primary School Teacher	184
	- Baqer Mehdi	
12.	Education of the Disadvantaged	199
	- Neshla	
13.	Child-Centred Education - Administrative Issues	216
	- R.P. Srivastava	
14.	Child Centred Education - In the Context of Universalisation of Primary Education	231
	- A.B.L. Srivastava	
15.	Teacher Education for Child Centred Education	251
	- S.P. Anand	
16.	Preparing Children for Future Citizens Citizens	266
	- Anima Sen	
17.	Value Oriented Education Through Better Communication Between Teachers, Parents and the Community.	301
	- Anant Pai	

18.	The Process of Developing Healthy Cognitive Structures for Social Cohesion and National Integration as an Integral Part of Child-Centred Education.	321
	- Moazziz Ali Beg	
19.	Educating the Child with Learning Disabilities A Child Centred Approach	338
	- Nirmala Gupta	
20.	Homework - Implications in Teaching and Learning Process	362
	- B. Phalachandra	
21.	Mastery Learning and Criterion Referenced Testing in Child Centred Education	373
	- Pritam Singh	
22.	Psychological and Other Welfare Services to meet the Needs of Disadvantaged Children with Special Reference to First Generation Learners	390
	- R.K. Saraswat	
23.	Development of Audio-Visual (Tape-Slide) Materials for Education at the Elementary Stage in the Area of Health Hygiene and Child Care	409
	- Kamla Bhutani	
24.	Facilitating Self-Discovery Process in Elementary School Children	423
	- Gursharan Kaur Joneja	
25.	The Child at the Centre of Education - A Developmental View	440
	- N. Vaidya	

26.	Education for the Socially Deprived and Socially Handicapped Children	460
	- T.E. Shanmugam	
27.	Child-Centred Education as an Investment	473
	- P.D. Hajela	
28.	Child-Centred Education: Science Education	486
	- B. Ganguly	
29.	Role of a Careers Teacher in Making Schooling * Child Centred - An Empirical Study	490
	- Gunamrit Kaur	
30.	Child Centred Approach in Pre-school Education - Implications for Primary Education	498
	- Amita Verma	
31.	Child Centred Education: Role of Parents' Teachers' Attitudes & Home and School Environments	514
	- M.C. Joshi	
32.	Encouraging Creativity Amongst Children	558
	- Naren Tewari	
33.	Child Centred Approach in Education: A Psychological Analysis	577
	- M.A. Khader	
34.	Education and Development of Girls in the Context of Child Centred Education	585
	- C. Dhar	

35.	Child-Centred Education - The Place of Reinforcement	593
	- R.K. Sharma	
36.	Gearing up Education for Structured Affective Development	611
	- Daya Pant	
37.	Over View of Child-Centred Education: The Underlying Principles and Pedagogy and A Programme of Action	632
	- M.P. Chhaya	
38.	Problem of School Drop-Outs- Reasons There of	644
	- M.C. Jain	
39.	Child Centred Education - Environmental Approach	657
	- Z.S. Chhikara	
40.	Child-Centred Education - Role of Psychological Testing Guidance & Counselling	665
	- V.K. Jain	

INDEX

CONTRIBUTORS' ADDRESS

E D U C A T I O N

Education's most precious nurturings
are Duty and Reverence
Duty for mastery and power
Through attainable knowledge,
and Reverence founded
in keen perception
of each moment holding eternity
and wholeness of existence !
To rear trained intolligence
through pursuit of right education
is a nation's great glory,
and also the very condition of its survival -
especially in the rhythms of galloping change
caus d by expositions of knowledge
and new revelations of Man's Spirit !

Prem Kirpal

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FOUNDATION OF EDUCATION

From flesh, bones, blood and matter
of the helpless dependent child
toward the making of some being
on the road to fast becoming
through stages of the life-cycle;
growth of body; mind and spirit;
man experiences education.

The foundations of Education
in the first two decades of life
from childhood to early youth
are crucial to all life.
In this time of growing awareness
of the self and the outer world
life's basics are learnt and lived.

Such basics are tools and skills
of work and communication,
curiosity to explore ;
pristine glory of imagination;
the wonder of the senses,
awareness of space and time,
and joy of living together.

Continuation sheet two

From the wondrous state of childhood
through adoloescence to youth
the foundations of personality,
drives and aptitudes for work,
pride and discipline of the citizen,
are learnt and cultivated
for the making of the man
to take charge of life
in this fast-changing world.
The foundations of education
should offer adequate contents
both appropriate and relevant
to body; mind and spirit.

For integrated man and good education
all the basics of foundation,
the best possible schooling
related to home and society
by effective methods and modalities;
teachers, mentors, friends and parents;
must be offered to the young !

Prem Kirpal

NATIONAL SYMPOSIUM

TITLE OF PAPER: CONCEPT DEVELOPMENT, DIAGNOSTIC TESTING AND
REMEDIAL TEACHING FOR CHILD-CENTRED EDUCATION

K.Venkatasubramanian

"It is the child for whom all theories
strive to forge patterns of learning"

-JEAN PIAGET

ROLE OF EDUCATION

Education is becoming a vital factor of National Development. Countries vie with each other to improve their education systems so that the National Development could be accelerated. Several empirical studies have proved the significant relationship among Education, socio-economic development, cultural progress and political awareness.

REVAMPING THE SYSTEM

The New Education Policy has been evolved in unison with this modern trend of moulding education as an important factor of national progress. The New Education Policy considers that the whole system of education should be revamped towards attaining the goal of better productivity.

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CHILD-CENTRED EDUCATION

The New Policy states:

"A Child-centred and activity process of learning should be adopted at the primary stage. First generation learners should be allowed to set their own pace and be given supplementary remedial instruction. As the child grows the component of cognitive learning will be increased and skills organised through practice".

Though the stress is on child-centred education at the primary stage, the learner-centred approach with the instructor as a facilitator should be adopted at every level of education depending upon the new theories of stages of development.

THE NATURE OF CHILD

There are extreme views on the nature of child by different educationists and psychologists.

Benson states,

"Child nature is no different today from what it was 1000 years ago. In spite of all, we can do in an educational way, the child will go in the wrong direction".

Perhaps, the educationists under this school of thought feel that control over the child is quite essential for its better progress.

Mr. Neil has a contradictory view; He says:

"Well, we set out to make a school in which we should allow children freedom to be themselves. In order to do this, we had to renounce all discipline, all direction, all suggestion, all moral training, all religious instruction. We have been called brave, but it did not require courage. All it required was what we had - a complete belief in the child as a good, not an evil being. My view is that a child is innately wise and realistic. If left to himself without adult suggestion of any kind, he will develop as far as he is capable of developing".

KNOWLEDGE EXPLOSION

Due to fast developments in Science and Technology and the advent of Computer and other modern gadgets, the explosion of knowledge is taking place in exponential terms. Under such changing, circumstances, it is necessary that new strategies are adopted in order to make the education process interesting to the students and in making the system more effective.

Theories have been changing and new concepts have been developed in the process of making Education child-centred. Educational implications and theories of Freud, Erikson, Skinner, Piaget and others have brought out valuable changes in the teaching and learning process. As an educational planner and administrator, I am not going to delve deep into these theoretical aspects.

The native intelligence as measured by IQ may be low or the environment may be poor.

Now a days, the enthusiasm for sending the child to school is increasing and first generation learners are admitted in large numbers in the educational institutions. Despite our efforts, these children have difficulty in learning due to lack of proper physical environment at home or social and psychological problems.

The emotional set-up may also disturb them. Lack of affection or excessive love, harsh treatment by teachers and parents because of deep desire in making the boy or girl a "big Officer" overnight, may be the reason. In their over enthusiasm, the child may be scolded excessively or the parents may be quarelling quite often between themselves without providing the feeling of security and affection to the child.

The student may be having physical handicap or due to Mother's pre-natal mal-nutrition or mal-nutrition after birth, children may be suffering from mental retardation.

DIAGNOSIS AND REMEDIAL MEASURES

In such cases, there is need to diagnose the cause of backwardness at the earliest stage and to provide relevant guidance and counselling in integrating the life of the child towards normalcy. The total process of diagnosis itself is complex involving the services of specialists and experts.

Diagnostic aspect of academic disability itself involves careful steps to be adopted in identifying the exact deficiency of the child. As we all know, there are various standardised tests in different subjects, but the teacher himself can identify the area of weakness of the child and design his own diagnostic tests in partial modification of the standardised tests. The major objective is to pinpoint the exact areas of weakness of the child. As in medicine, wrong diagnosis will be detrimental. In education, it will take some time to see the ill effects of backwardness and its wrong diagnosis and treatment. So, we should be more careful in educating the child.

Teachers' Centres or Associations can also engage in Action Research Programmes so that they can evolve such diagnostic tests. The teachers can apply these tests on children and know the details of the deficiency at micro-level so that they could give concrete suggestion on remedial measures. This is the most important aspect of child-centred teaching-learning process. The general class room teaching which is suitable for homogeneous groups with identical aspiration and background to some extent, is not adequate for paying individual attention. The class room teaching has to be augmented with special tutorials to help the first generation learners who are admitted into schools

with varied aspirations and backgrounds. Some of the factors of backwardness are beyond the control of the teacher, for example - if the home atmosphere is not conducive for learning some provision should be made for the students to sit and concentrate on studies after school hours.

PREVENTION IS BETTER THAN CURE

It is better to prevent backwardness of children in respect of factors which are under the control of a school teacher. The concepts of Minimum Learning Continuum (MLC) and Mastery Learning should be carefully applied from the beginning. This will enable the students to proceed in small steps in mastering the fundamental concepts which build up other complex principles, ideas and theories.

There is no point in merely covering the syllabus without uncovering the concepts and principles. It is not enough to complete the course without continuous evaluation of the achievements of the children. It will be relevant to use the formative evaluation procedures. Child-centred methods and techniques of teaching-learning should alone be applied.

THE ROLE OF TEACHERS

All our efforts ultimately depend upon the sincerity and devotion of the teachers in implementing any scheme by bridging the gap between theory and practice. The teacher may complain that with the increase in the number of students in the class room how it will be possible to give individual attention in diagnosing their weakness and adopting remedial measure. "Where there is a Will there is a Way". The Teacher can give individual attention atleast in batches by working out a scheme of periodic testing of children. Say five students today, another five the next day and so on. By skillfully planning work-cards or assignment cards the work load of the teacher can be reduced in Remedial Teaching and NCERT can help in developing such materials.

N.C.E.R.T.'S ROLE

The NCERT has been rendering pioneering service in implementing innovative schemes. It has prepared many guide books, kits and other teaching aids to help the class-room teachers. It can further involve in preparing modern educational aids like the Video-tapes and Audio-tapes and other learning materials, especially in the area of remedial teaching in the context of child-centred education as envisaged in the N.E.P. These materials can be provided to the individual schools or to start with a cluster of schools coming under School complex scheme.

CONSLUSION

Mr.J.Gordon says:

"Children are not cars that you turn off an assembly line. Children come to us different, and if we do our job well, they should emerge from our experiences even more different and not alike as one Ford is like that of 'others".

So, every individual child requires special attention and as Swami Vivekananda viewed we should make the latent talent patent by bringing out the potential in each by providing ample opportunity.

Child-Centred Education attains much importance in the context of New Policy on Education because all our efforts will go in vain if the output does not reach the individual students. The most effective method of attaining optimal learning by the individual is child-centred approach.

Let the delebrations in this vital symposium on child-centred education usher in a new era of light and learning in building up a New Bharat .

TITLE OF PAPER: CRITERION REFERENCED TESTING IN THE CONTEXT
OF CHILD-CENTRED EDUCATION : SOME STATISTICAL
PROBLEMS IN MAKING INSTRUCTIONAL DECISIONS

R.K.Mathur*

INTRODUCTION

With the need for significant changes in our elementary and secondary schools, clearly documented in the National Policy on Education (NPE) - 1986 and Programme of Action (POA) we have to develop and implement a diverse collection of alternative educational programmes that seek to improve the quality of education by individualising instruction. It has been noted in NPE 1986 (page 11) that "A child-centred and activity based process of learning should be adopted.... learners should be allowed to set their own pace and be given supplementary remedial instruction". In the context of evaluation process and examination reforms the NPE-1986 states (at page 24) that "evaluation process and assessment of performance should be an integral part of the process of learning and teaching and should be employed to bring about qualitative improvement in education". A common and

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important characteristic, in functional terms, of the recommendations on examination reform and evaluation process is that the curriculum should be defined in terms of instructional objectives and learning outcomes. It has been noted in the POA (1986) that "the Boards of Education will lay down the level of attainment and prescribe the learning objectives corresponding to these levels of attainment in terms of knowledge, comprehension, communication, applicational skills and the ability to learn". A programme specified in such a way is referred to as criterion-based. The over all goal of a criterion-based instructional and testing programme is to provide an educational programme which is maximally adaptive to the requirements of the individual learner. The instructional objectives specify the curriculum and serve as a basis for the development of curriculum materials and criterion-based achievement tests. Among the best examples of criterion-based programmes are Individually Guided System of Instruction (IGSI) (Glaser 1968), Programme for Learning in Accordance with Needs, (Flanagan 1969), and a Model for School Learning (Bloom 1968; Carroll 1963; 1970; and Block 1971).

While not all educators agree on the usefulness of these instructional and evaluation models in the schools, the

position taken in this paper is that these models are useful and that the usefulness of these models will be enhanced by developing testing methods and decision procedures specifically designed for use particularly in the context of formative evaluation of the learner. The purpose of this paper is to outline some appropriate statistical methods that may prove of use in making instructional decisions for students.

It appears that much of the discussion on criterion-referenced testing stems from different understandings as to the basic purpose of testing in these instructional models. It would seem to us that in most cases, the pertinent question is whether or not the individual learner has attained some prescribed degree of competency on an instructional performance task. Questions of comparisons among individuals seem to be, by and large, irrelevant in the context of criterion referenced testing. In many of the new instructional models tests are used to determine on which instructional objectives a learner has met the acceptable performance level standard set by the test designer. This test information is usually used immediately to evaluate the student's mastery of the instructional

objectives covered in the test, so as to locate him appropriately for his next sequential instructional unit. Tests specifically designed for this particular purpose have come to be known as Criterion-Referenced Tests. Criterion-referenced tests are specifically designed to meet the measurement needs of the new individualised-instructional models. In contrast the better known norm-referenced tests are principally designed to produce test scores suitable for ranking learners on the ability measured by the test.

(II) Criterion-Referenced Tests: Definitions and Selected issues

Criterion-Referenced Tests have been defined in a multitude of ways in the educational literature. See for example, Glaser and Nitko (1971); Millman (1974); Harris et al (1974); and Livingston (1972). The various definitions of criterion-referenced test have been reviewed by Millman (1974); Hambleton, et al (1978) and by Singh (1982). We shall not go into the merits of the various definitions. But it appears to me that the least restrictive definition of criterion-referenced testing has been proposed by Glaser and Nitko (1970) :

"A criterion-referenced test is one that is deliberately constructed so as to yield measurements that are directly

interpretable in terms of specified performance standards. The performance standards are usually specified by defining some domain of tasks that the students should perform. Representative samples of tasks from this domain are organised into a test. Measurements are taken and are used to make a statement about the performance of each individual related to that domain (page 653)".

It follows from the Glaser and Nitko definition that the construction of a criterion-referenced test required sampling of items from well specified domains of items. If the domain has been well specified and the items are selected from it by probability sampling, it becomes possible to estimate the domain score for an examinee. Only then this score has substantial meaning and can be interpreted on an absolute criterion-referenced scale. A common thread running through the various approaches to criterion-referenced tests is that the test developer has to give sufficient attention to domain specification and problems of item-sampling design.

If one accepts the Glaser and Nitko definition of a criterion-referenced test it is apparent that the test may often be multi-dimensional while made up of uni-dimensional sub-scales. That is, the items from a criterion-referenced

tests are organised in distinct and different sub-scales of homogenous items measuring common skills. An instructional decision for each individual is then often made on the basis of his performance on each sub-scale. Major interest may thus rest on sub-scale scores rather than the aggregate score.

One of the problems yet to be reckoned with for criterion-referenced tests is an instance of the band-width fidelity issue (Cronbach and Gleser, 1965). When the total testing-time is fixed and there is interest in measuring many competencies, one may be faced with the problem of whether to obtain very precise information about a small number of competencies or less precise information about many more competencies. The problem of how to fix the length of each sub-scale so as to maximize the percentage of correct decisions or some similar measure of overall decision-making accuracy on the basis of test results has yet to be resolved, or indeed, to be formulated satisfactorily.

(III) Decision-Theoretic Approach to Criterion-Referenced Testing

We shall assume that a criterion-referenced test is constructed by randomly sampling items from a well-defined domain of items measuring an instructional objective. (When

a criterion-referenced test measures more than a single objective, the procedures described here may have to be repeated for each objective). Our conceptual frame-work for criterion-referenced testing is as follows. We see testing as a decision theoretic process. One of the main differences between norm-referenced tests and criterion-referenced tests is in terms of the kinds of decisions they are specifically designed to make. Norm-referenced measurement is particularly useful in situations where one is interested in fixed quota selection or ranking of individuals on some ability continuum. Criterion-referenced measurement involves what Cronbach and Gleser (1965) would call a "Quota free selection problem". That is, there is no quota on the number of examinees who can exceed the cut-off score or threshold on a criterion-referenced test. A cut-off score is set for each subscale of a criterion-referenced test to separate examinees into two mutually exclusive groups. One group is made up of examinees with high enough score (greater than or equal to the cut-off score) to infer that they have mastered the material to a desired level of proficiency. The second group is made up of examinees who did not achieve the minimum proficiency standard.

The primary problem in criterion-referenced testing models is one of determining if T , the student's true mastery-level, is greater than a specified standard. Here T is the "True-score" for an examinee in some particular well defined content domain. Since we cannot administer all possible items in the domain due to constraints of testing-time and resources we sample some small number of items to obtain an estimate of T represented as \hat{T} . The value of c is some what arbitrary threshold score used to divide individuals in the two categories i.e. 'masters' and 'non-masters'. The obtained scores, however, may differ from the 'true score' (or the domain score) due to sampling of items from the universe or the content domain.

Basically then, the examiner's problem is to locate each examinee in the correct category. There are two kinds of errors that occur in this classification problem: false positive and false negative. A false positive error occurs when the examiner estimates examinee's ability to be above the cutting score when, in fact, it is not. And false negative error occurs when the examiner estimates an examinee's ability to be below the cutting-score when the reverse is true. The seriousness of making

a false positive error depends to some extent on the structure of the instructional objectives. It would seem that this kind of error has the most serious effect on programme efficiency when the instructional objectives are hierarchical in nature. On the other hand the seriousness of making a false negative error would seem to depend on the length of time a student could be assigned to a remedial programme because of his low test performance. The minimization of expected loss would then depend in the usual way on the specific losses and the probabilities of incorrect classification. This is then a statistical exercise in the minimization of what we call the expected loss. In the section below we give a mathematical decision-theoretic model for location of examinees to mastery states.

In the next section we give the results on estimation of examinees' domain-score or true score for deriving the rules for location of examinees to mastery states or for estimation of examinees' domain score. For this, we adopt a simple macro-model of obtained scores named as 'Gaussian error model' in Lord and Novick (1968)

(IV) Classification into one of the two groups :
Masters & Non-masters

(a) Assumptions

We assume that the obtained score X of a student (examinee) is the algebraic sum of two components, T and E . The component T represents the domain (or true) score of a student, a quantity relatively stable as long as the items are sampled from the same universe or domain. The other component E is the random error of measurement, arising mainly due to sampling of items from the specified criterion domain. E is assumed to be normally distributed independently of T , with zero mean and a constant experimental determinable variance σ_E^2 . Under the above assumptions

$$(1) \quad E(X) = E(T) = \mu \quad (\text{say})$$

and the variance σ_X^2 of the obtained score X is

$$(2) \quad \sigma_X^2 = \sigma_T^2 + \sigma_E^2.$$

The conditional probability distribution of the observed score of a student whose domain-score or true-ability is T is given by

$$(3) \quad f(x/T) = N(T, \sigma_E^2),$$

Where $N(T, \sigma_E^2)$ denotes a normal distribution with mean T and variance σ_E^2 .

Let the probability distribution of T be given by

$$(4) \quad f(T) = N(\mu, \sigma_T^2).$$

The correlation between X and T is given by

$$(5) \quad r = \frac{E[(X-\mu)(T-\mu)]}{\sigma_X \sigma_T} = \frac{\sigma_{XT}}{\sigma_X \sigma_T}.$$

r is known as the index of reliability of X and r^2 which gives the proportion of the variance in test scores which is due to 'true differences' between individuals is known as the reliability coefficient of X.

The joint probability distribution of T and X is given by

$$(6) \quad \frac{1}{2\pi \sigma_T \sigma_X \sqrt{1-r^2}} \exp \left\{ -\frac{1}{2(1-r^2)} \left[\left(\frac{T-\mu}{\sigma_T} \right)^2 - 2r \left(\frac{T-\mu}{\sigma_T} \right) \left(\frac{X-\mu}{\sigma_X} \right) + \left(\frac{X-\mu}{\sigma_X} \right)^2 \right] \right\}$$

Writing $\frac{T-\mu}{\sigma_T} = t$ and $\frac{X-\mu}{\sigma_X} = x$, the joint probability

distribution of x and t is given by

$$(7) \quad f(x, t) = \frac{1}{2\pi \sqrt{1-r^2}} \exp \left\{ -\frac{1}{2(1-r^2)} [t^2 - 2rtx + x^2] \right\}$$

Let ξ denote the cut-off score separating 'non-masters' from 'masters'. If a student's domain score (or true score) is less than ξ his true group is 'non-master'; if his domain score is greater than or equal to ξ , his true group is 'master'.

(b) Optimal Operational Pass-mark

Let η be the operational cut-off point (on the observed score continuum) for classifying a student as 'master' or 'non master'. If a student's obtained score X is below η he is classified as 'non-master'; if his obtained score X is η or above, he is classified as 'master'.

We shall call η Operational pass-mark. In following an operational mark η , the evaluator can make two kinds of errors. If the student is from true-class 'master' the examiner can classify him as 'non-master' (false negative type of error); or if he is from true-class 'non-master', the evaluator can classify him as 'master' (false positive type of error) on the basis of his observed score X .

Let C_1 represent the cost of misclassifying a student as 'non-master' when his true class is 'master' and C_2 the cost of misclassifying a student as 'master' when his true class is 'non-master'.

Costs of correct and Incorrect classification

True group	Assigned Group	
	'Non-master'	'Master'
Non-master	0	C_1
Master	C_2	0

These costs may be measured in any kind of unit. It is only the ratio of the two costs that is important. In practice, the costs are often taken as equal. The expected cost of misclassification is given by

$$(8) \quad M = C_1 \alpha + C_2 \beta$$

where α and β represent the probability of the joint events $\{X < \eta, T \geq S\}$ and $\{X \geq \eta, T < S\}$,

respectively. Under the assumptions stated above, α and β are given by

$$(9) \quad \alpha = \Phi(x_1) - \Psi\left(\frac{x_1}{f}, x_1, f\right), \text{ and}$$

$$(10) \quad \beta = \Phi\left(\frac{x_0}{f}\right) - \Psi\left(\frac{x_0}{f}, x_1, f\right),$$

where $x_1 = \frac{\eta - \mu}{\sigma_x}$, $x_0 = \frac{S - \mu}{\sigma_x}$ and f is the

index of reliability of the observed scores and $\Phi(h)$, and

$\Psi(h, k, f)$ are defined in (11) and (12), respectively.

$$(11) \quad \Phi(h) = \frac{1}{\sqrt{2\pi}} \int_{-\infty}^h \exp\left(-\frac{x^2}{2}\right) dx; \text{ and}$$

$$(12) \quad \Psi(h, k, f) = \int_{-\infty}^h \int_{-\infty}^k \psi(x, t) dt dx,$$

where $\psi(x, t)$ has been defined in (7).

Let $\frac{C_1}{C_2} = K$ represent the relative underriskability of the two types of misclassification. Substituting α and β in (8) by their values given by (9) and (10), respectively, and noting that $C_1 = KC_2$

M reduces to

$$(13) \quad M = C_2 \left[K \Phi(x_1) + \Phi\left(\frac{x_1}{p}\right) - (K+1) \Phi\left(\frac{x_1}{p} \sqrt{1+p^2}\right) \right]$$

For given values of K , p and x_0 we can find the value of x_1 which minimises M .

Minimisation of M leads to optimal operational pass mark η given by

$$(14) \quad \eta = \mu + (5 - \mu)/p - p \frac{\sqrt{1+p^2}}{p} \phi\left(\frac{x_0}{p} \sqrt{1+p^2}\right)$$

θ is given by

$$(15) \quad \theta = \left[\pi \left(\frac{1}{2} \right)^{\frac{k+1}{2}} e^{-\frac{k+1}{2}} \right] \quad \text{for } k=1$$

$$= 0 \quad \text{for } k=1$$

It may be noted that when $p=1$, that is the scores are perfectly reliable, η the optimal operational pass-mark is equal to 5 which is the prescribed cut-off score on the domain-score continuum separating 'masters' from 'non-masters'.

It may also be seen that when the ratio of the undesirabilities of the two types of misclassification is unity, the optimal - operational pass-mark simplifies to

$$(16) \quad \mu + (S - \mu) / p^2$$

It may be noted that $p^2 \leq 1$. Therefore, if S is greater than μ , as is usually the case, and if K is equal to 1, the operational pass-mark η will be greater than the cut-off score S .

Thus, we have the following important result.
When the ratio of the two costs of misclassification is unity and the cut-off score S is greater than the average of the observed Scores X , (S is normally kept between 80% to 90%) then the optimal operational pass-mark η is always greater than the prescribed cut-off point S on the domain-score continuum . Separating 'masters' from 'non masters'.

We have in the above section worked out the optimal operational pass-mark from a decision-theoretic point of view, assuming the Gaussian Error model.

(V) Estimation of examinee domain score

There are several methods available for the estimation of the domain score for an examinee. The basic problem is,

given an examinee's obtained score X on a criterion-referenced test, to estimate the examinee's 'true' (or domain) score, had he been administered all the items in the domain of items measuring the objectives covered by the test.

One of the earlier attempts to produce an estimate of the true score of an examinee was made by Kelly in 1927 (Lord and Novick 1968, page 65).

Mathur (1966, 1968) derived the true-score estimator assuming that the observed score distribution is moderately non-normal and represented by the first four terms of the Edgeworth's form of type A expansion. The author has shown that the regression estimate of true score of an examinee whose observed score X is given by

$$(1) \hat{T} = \mu + \frac{f^2 \sigma_X \phi(x)}{f(x)} \left[\left\{ \gamma + \frac{1}{6} H_4(x) + \frac{\lambda_4}{24} H_2(x) + \frac{\lambda_2^2}{72} H_1(x) \right\} + \frac{1}{f^2} \left\{ \frac{\lambda_3}{2} H_2(x) + \frac{\lambda_4}{6} H_1(x) + \frac{\lambda_2^2}{12} H_5(x) \right\} \right],$$

where $X = \frac{X - \mu}{\sigma_X}$.

λ_3 and λ_4 represent the third and fourth cumulants of X , and $H_r(x)$ denotes the Hermite Polynomial of the r th degree; and

$$(18) f(x) = \phi(x) \left[1 + \frac{\lambda_3}{6} H_3(x) + \frac{\lambda_4}{24} H_4(x) + \frac{\lambda_3^2}{72} H_6(x) \right] .$$

It may be noted that if $\lambda_3 = 0$ and $\lambda_4 = 0$, $f(x) = \phi(x)$ and (17) reduce to

$$(19) \hat{T} = \mu + \rho^2 (X - \mu)$$

which is the well-known Kelly's estimator.

It may be noted that if λ_3 , λ_4 or both are non zero, the density function of x is non-normal, and in that case the true-score estimator is non-linear in X as long as $\rho^2 \neq 1$.

Result (17) has been derived by working out the regression of true-score on observed score, under the assumption that the true score T is estimated by X , where $X = T + E$; E is normally distributed independently of X with zero mean and constant experimentally determinable variance σ_E^2 ; and the distribution of $x = \frac{X - \mu}{\sigma_X}$ is given by the first four term of the Edge Worth's form of type A expansion.

It may also be noted that Jackson (1972) used Kelly's estimator for applying with binary data by transforming the score by the arcine-transformation.

The Jackson's estimator is not ideal since it does not take into account any prior-information that may be available. Novick, et al (1973) and Swaminathan et al (1975) used Bayesian decision-theoretic approach for estimation of examinee's domain score. The Bayesian solution given by Novick et al (1973) or Swaminathan, et al (1975) are more complicated than the results derived here under the simple macro-model. We shall not discuss here the Bayesian decision theoretic procedures for estimation of examinee's domain-score or for allocation of examinees to mastery states.

(VI) Summary and Conclusion

The successful implementation of criterion-referenced instructions and testing programmes depends, in part, upon the availability of appropriate procedures for developing and utilizing criterion-referenced tests for monitoring student progress. The discussion in this paper has centered on contributions to criterion-referenced testing in the areas of definitions and terminology, allocation of the examinees to mastery-states from a decision-theoretic point of view, and estimation of 'domain-score' as regression-estimator.

There can be no doubt that, if achievement testing (and educational assessment generally) is to advance significantly, it will do so only through coming to grips with the problems of domain specification, item-banking and items sampling. These procedures are merely agents of a general philosophy that teaching and learning should be child-centred, and instruction and evaluation should, in course of time, be individualised to cater to the different learning needs and rate of growth of each individual learner.

Much that we have said about child centred teaching and learning may seem "Old hat" to some educators. After all an approach to learning or instruction that is systematic and objective based and learner centred has long been the trade marks of the paragons of the teaching profession. What should be 'New Hat' however, is the message that child centred theory, Practice and research now offers these trade marks of our best teachers to all our teachers. Surely at a time when public confidence in the teaching profession is low, such a message cannot be ignored.

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REFERENCES

- Block, J.H. (Ed.) Mastery Learning : Theory and Practice,
N.Y. Holt, Rinehart and Winston, Inc. 1971.
- Bloom B.S. Learning for Mastery. Evaluation Comment,
1, No. 1, 1968.
- Carroll, J.B. A model of school learning. Teachers College
Record, 1963, 64, 723-733.
- Carroll, J.B. Problems of Measurement related to the concept
of learning for mastery. Educational Horizons 1970,
48, 71-80.
- Cronbach L.J. & Glaser, G.C. Psychological Tests and Personal
Decisions, Urbana, Ill, 1965.
- Flanagan, J.C. Programme for learning in accordance with need:
Psychology in schools, 1969, 6, 133-135.
- Glaser R. Adapting the elementary school curriculum to
individual performance. In proceedings of the 1967
invitational Conference on Testing Problems.
Princeton, N.J.ETS, 1968.
- Glaser, R & Nitko, A.J. Measurement in Learning and Instruction
in R.L. Thorndike (Ed.) Educational Measurement.
Washington, American Council in Education, 1971, 625-670.

- Hambleton, R.K. et al. Criterion-Referenced Testing and measurement. A review of technical issues and developments, Review of Educational Research 1978, 48, 1-47.
- Harris, C.W. et al. Problems in criterion-referenced measurement, CSE monograph series in Evaluation, No. 3. Los Angeles; Center for the study of Evaluation, University of California, 1974.
- Jackson, P.H. Simple approximations in the estimation of many parameters, British Journal of Mathematical and Statistical Psychology, 1972, 25, 213-229.
- Livingston, S.A. Criterion Referenced applications of classical test-theory. Journal of Ed. Measurement, 1972, 9, 13-26.
- Lord, F.M. and Novick, M.R. Statistical theories of mental-test scores. Reading, Mass., Addison Wesley, 1968.
- Mathur, R.K. Some problems in reliability and classification Doctoral Diss; Indian Institute of Technology, Kharagpur 1966.
- Mathur R.K. A two stage sequential decision strategy for classification by ability groups; Cited in Cronbach L.J. et al : Dependability of behaviour Measurement. N.Y. Wiley, 1972, P. 135.

Millman, J. Criterion referenced measurement. In W.J. Popham (Ed.) Evaluation in Education, Current application, Berkeley, California, Mc Cutchan Publishing Co., 1974.

National Policy on Education-1986, New Delhi, Ministry of Human Resource Development, Govt. of India, 1986, P. 11 and page 24.

Novick, M.R. et al, The estimation of proportions in m groups Psychometrika 1973, 38, 19-45.

Programme of Action, 1986, N. Delhi, Ministry of Human Resource Development, Govt. of India, 1986, P. 148.

Singh, P. Criterion Referenced Testing, Monograph Circulated by the Department of Measurement and Evaluation, NCERT, New Delhi, 1982.

Swaminathan, H., et al. A Bayesian procedure for use with Criterion referenced tests, Journal of Educational Measurement 1975, 12, 87-98.

TITLE OF THE PAPER : NURTURING AFFECTIVE INPUTS OF PUPIL'S
PERSONALITY - IMPLICATIONS FOR TEACHERS.

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The last few decades of educational theory and practice the world over, seem to have overthrown all humanistic concerns and have undervalued the role of "affective-domain", primarily to keep pace with the trends in "knowledge-explosion", and secondarily, because of problems in transacting affective curriculum. The affective domain plays an important part in pupil's all round growth and maturity. If education has to be instrumental in the attainment of this goal it has to take due cognizance of the feelings, attitudes, and emotional components of lives of pupils. Education in affective domain is closer to the goals of child-centred education, with the emphasis of both on such learning outcomes as would directly tap the inherent cognitive and affective potentialities. In this sense education differs, from training which demands 'external controls' to meet external norms and standards of civilized societies. Education demands 'inner controls', self-made decisions, independent thinking, consideration of alternatives and personal values and a willingness to face consequences of such independent actions. In contrast, training

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is essentially imposed by teachers, parents and significant others to produce thinking and behaviour which is common to all and is a "socially desirable" goal.

The goals of child-centred education; thus, include proper emotional and attitudinal development. Moreover, affective attributes such as interest and motivation, if associated with cognitive learning outcomes and success experiences result in intensifying the interest, application, and involvement towards the cognitive activity. In this context affective attributes need to be carefully chosen reinforcement contingencies. Affective characteristics in this sense, share a number of 'educationally' relevant features with cognitive. They may both serve ^{as} (i) mediating or instrumental variables which either facilitate or disrupt the achievement level (ii) moderator variables determining differential responses to different aspects of instruction like methods, content etc., (iii) Outcome variables in keeping with educational goals in their own right and (iv) they may both result in learner's acquisition of some personal characteristics that may be termed as unintended educational side effects, generally labelled as 'hidden curriculum' or 'implicit education'.

Nature of Affect

Affects are positive and negative feelings that may be either specific to particular conditions (affective states) or

characteristics of particular individuals (affective traits). They may be qualitatively differentiated feeling states, such as joy, surprise, fear and anger, they may be understood as feelings about something, or they may be free-floating and generalized, such as feelings of euphoria, vague uneasiness, or anxiety (Lazarus, 1971; 1977; Spielberger, 1972; Tomkins, 1962, 1963). Educationally relevant affects include feelings about school, about learning, about subject matter, and about the self as learner (Bloom, 1976).

Positive affects such as interest and motivation are pleasurable feelings that accompany activities undertaken for their own sake. They serve to sustain self-determined activities both in the absence of external reinforcement and in the face of negative reinforcement. Interests are important examples of intrinsic motives. (Deci, 1975, Hunt, 1963, White, 1959). In school, motivation is one of the most important factors in learning, along with ability and previous background of learning. Motivation is a factor in other school related variables such as pupil adjustment formation of attitudes, learning of desirable values, development of morals and character and classroom relationships, including pupil-teacher relationship.

Motivational Strategies as Affective Inputs for Pupil Growth and Learning :

It is commonly recognized that there are two major reward systems operating in the classroom. The "intrinsic"

which naturally arises from the growth of ability and its manifestations and the "extrinsic" which is reflected in the evaluations and expressions of teachers, fellow students and outsiders. Both intrinsic and extrinsic reward systems have been found to be helpful in gearing students' motivation to identify him with school, to get involved in its activities, and prevent him from being alienated in the classroom.

Hopstein & Kempa (1985) have stressed the desirability of achieving a match between curricular features and learner characteristics in relation not only to cognitive variables like developmental readiness, intellectual ability, cognitive styles etc., but also to affective factors like interest and motivation. "Motivational and other characteristics are sufficiently important in school learning to engage our most serious consideration if we wish to maximize.....classroom learning" (Ansubel; et al 1978).

Two types of strategies have been adopted to enhance motivation to learn :

- Suggestions relating to the nature, structuring and presentation of subject matter.
- Suggestions concerning the nature of pedagogical procedures and interventions to be adopted by teachers as well as the climate of the learning environment to be established by the teacher.

The former are designed to positively influence the student's disposition toward learning a subject through arousal of student's interest in the subject whereas the latter are designed to enhance their motivation to become 'involved' in learning activities related to that subject. The motivational effect of the former, according to Hofstein and Kempa, will be only secondary. Primarily, teacher's pedagogical interventions and activities which arise from the use of particular teaching strategies may be claimed to have a direct bearing on students motivation and will enhance 'willingness to engage in learning activities. These latter, appear to be akin to 'intrinsic' motivation. But very often motivating qualities of a particular instructional procedure ^{are} not an intrinsic function of that procedure. Motivation may be enhanced in most situations by properly combining a particular teaching method with learner characteristics.

Adar (1969) conducted a very thorough study with regard to motivational outcomes of this kind of interaction. The notion of "motivational pattern" as introduced by her implies that learners differ with respect to their preference for and responsiveness to different instructional features and that these preferences are relatively stable so that they can be clustered together to form one learner's motivational pattern. Adar identified four major motivational patterns in the student population studied by her. These she referred to as 'Achievers',

the 'Curious', the 'Conscientious', and the 'Socially Motivated' respectively. These motivational patterns were related to the subjects' "Preferred modes of learning and instruction" classified by Adar into three major areas namely; (i) Nature and Orientation of Students learning activities such as obtaining information and skill, problem solving, learning of laws and principles, learning by discovery, involvement in learning tasks (ii) control of goals, and organization of learning tasks such as teacher control of task, student control of task, openendedness of learning goals, teacher control of learning goals, learning in groups, individualization of learning, (iii) Evaluation of student performance such as objective- competitive by teacher, personal/individual by teacher, peer-group evaluation frequency of evaluation.

Adar found that students in the 'socially motivated' group had no distinctive profile. Their only major characteristic was their preference for group learning activities and for evaluation of their performance by their peers, rather than teachers. The most pronounced pattern appeared for students in the 'curious' category with preference for discovery and problem solving activities, open-ended tasks, and student-controlled tasks. There was no concern with any feedback. 'Achiever's and 'conscientious' students in contrast preferred expository method of teaching and learning. They preferred objectives and goals of learning clearly defined, and a desire for regular evaluation and feedback.

Following are some of the more formally recognized models and strategies in the affective domain which may be utilized as either means of structuring affective inputs of education for stimulation of pupils' development through appropriate and conducive educational experience or serve as motivational strategies to develop positive affect and involvement of the learner towards curricular and co-curricular activities.

Humanistic Approach

John Dewey (1896) the founder of Progressive Education Movement, joined later by other humanists^{like} Rogers (1951), Combs and Snygg (1959), Maslow (1970), emphasized the need to treat the learner as a unique individual and to make education relevant to his needs (child-centredness) rather than focus on teaching of the curricula (subject centredness). Learning material and process under this humanistic philosophy relates directly to the interest and potential of the pupil and helps him attain self-realization. A typical humanistic learning experience takes care of learner's 'involvement', 'feelings' and 'attitudes' towards the subject matter; and hence motivates him to not only understand in his head 'what' has happened but also 'why' it has happened.

A prerequisite to learning, under this philosophy, is pupil's full freedom to learn. Carl Rogers (1969) speaks of 'freedom' in the sense of 'internal freedom', where a person

is free within himself, is open to experience, has a sense of his own freedom and responsible choice and is not so likely to be controlled by his environment. Applied to classroom this notion requires that a teacher not only permit a great deal of individual initiative in determining one's learning experience, but the experience of using one's full capacities. Classroom environment should permit and encourage self-determination and self-expression. This should also be true of participation in outside classroom activities centred around non-cognitive aspects of pupil's personality such as identification with certain role-models, selection of leisure time activities, selection of games and games partners etc.

Improving the classroom Climate :

Following the humanistic ideology, the teacher should set the general tone of the classroom. Carl Rogers (1958) suggested some characteristics of the teacher that aid in producing an appropriate climate :

- (i) A teacher should be "congruent"
- (ii) A teacher should have "positive regard" for the pupil.

Being congruent means that the teacher must convey his true feelings about his pupils, for those feelings will be picked up by them, anyway, from his expression, tone of voice, posture and so on. Self-contradictory behaviour of the teacher will confuse the pupils and create feelings of mistrust for the teacher.

Having positive regard means that the teacher must accept the child as a person of worth, even though he may not be able to accept some of the child's behaviour. Pupil's drawbacks should not be conveyed to him to make him feel rejected, stupid, or guilty. Each child has something that one can admire. Furthermore, one can try to view the child as a growing, developing, and not yet complete person who has a potential which the teacher can help to develop.

A desirable classroom climate also requires that the teacher be able to accept honest expressions of feelings from children without becoming anxious, negative, or punitive. Humanism in another sense means looking at the human organism as a unified whole rather than a series of different parts related to mind and body separately. They are aspects of the total human being, so that any attempt to understand and help the child should be viewed as an integrated effort to help the child develop as a rational, moral and humane human being.

Apart from improving the classroom climate the important inputs that Humanistic ideology of education can nurture are : (i) Developing a realistic self-concept, strengthening and modifying it and (ii) inducing self-acceptance. The emphasis is on helping the pupil develop his uniqueness as opposed to becoming a "standard" member of society. This by no means implies that an individual become apathetic to needs and

feelings of others and an undesirable element of society. Rather, self-actualizing people have a deep concern for mankind.

The following dimensions of a healthy self-concept need to be strengthened :

- i) Clarity : One needs to know clearly who he is, what his attributes are, and what he believes etc.
- ii) Self-acceptance: One needs to accept himself as a reasonably good and adequate person.
- iii) Stability: One's opinion about himself should not fluctuate every now and then depending upon the evaluation received from others.
- iv) Realism : One's self-concept may be based on misconception, misinterpretation of feedback, lack of feedback from others etc. Or, one may be using defence mechanisms and may not have an appropriate image of himself. Self-concept should be realistic if it has to help in the process of self-actualization.

Modifying the Self-Concept :

Protection of realistic self-concept and its enhancement is essential. In the absence of proper feedback and self-analysis, one may form an unrealistic or negative self-image leading to psycho-social problems. The pre-requisites to helping a person change his self-concept into a healthy one are understanding the child, communicating with him in a psychologically non-threatening and non-coercive environment and accepting him as he is. 'Enhancement' of his self through positive methods and suggesting that he is already worthy and is valued, and conveying the impression that he will be happier if he makes certain changes, will go a long way in modifying his self-image. Tying up the need for change with sensitive aspects of the self also proves useful. Not all aspects of self are of equal significance to the self or the self-concept. Hence commenting on strong points rather than weak, and helping the child enhance them is a positive approach recommended by humanists.

Aiding Self-Acceptance :

One does not infrequently come across cases who have negative self-evaluations, because they lack certain abilities or personalities. It is not difficult for anyone to recognize such children. Careful observation can help identify children who are dependent, withdrawing, defensive, fearful, sullen.

Not only what they say but their facial expressions, postures, and approaches to 'others' and to school tasks allow us to draw such inferences about their self attitudes. For such cases, simple reassurance, acceptance and support or talking them into changing their self-evaluation will not help. Learning to live with one's limitations is very difficult if those limitations inhibit activities that are important either to oneself or to others. Ringness (1975) suggests three ways to 'Compensate' for a child's limitations :

- i) One can try to change the environmental situation so that a limitation is no longer a limitation or at least is no longer important.
- ii) One can aid the child to developing strengths and overcome his weaknesses.
- iii) One can help the child to modify his goals so that the limitations do not hold him back and could even be advantageous.

i) Modifying the Environment :

Since we recognize individual differences in personality, ability and background, we should try to adapt the school to the pupils' needs instead of making pupils adapt to the school. Our instructional materials, teaching methods and other physical and community resources should be tailored to the needs of

the individual pupil, programme, instruction, textbooks for various reading levels and disabilities, and other means for individualizing instruction like freedom of choice of study, tutoring special classes etc. are some of the helpful ways. These also lie at the heart of child-centred approach in education. Such means and practices may not increase any kind of academic ability but they can help in attainment of scholastic success. They also provide opportunities to emphasize work in subjects in which the child is skilled or talented.

ii) Helping to Develop Strengths :

Pupils who are deficient in certain ways can be helped to gain recognition and a feeling of self worth by developing their unique abilities. For example an intelligent boy with no social recognition and self-confidence may be encouraged to explore, discover and thereby enhance some special skills like coaching others, which will help him become popular. Children can also be helped to change themselves by showing how their behaviours causes others to dislike or ignore them and by giving alternative behaviours to practice. Teachers can use modelling and role-playing to demonstrate this.

iii) Modifying a Child's Goals :

Modifying a child's goals will help to minimize his limitations. For example a child may not be a good / ^{football} player but may achieve recognition as a sports writer for his

school news bulletin. One may not do in one school subject like English but may outshine others in a subject like Maths. Thus he gets success experience in a field related to his original goals, i.e. doing well in studies and be helped to improve his self-confidence.

Maslow's Theory of Motivation

Abraham Maslow (1954) took the position that motives can be divided into two classes: those aimed at maintenance of the on-going human organism, and those which are growth-directed and aid its development. Maslow suggested that motives could be placed in a hierarchy from the most basic on top, and that in general the basic motives would have to be satisfied before higher order motives would take effect. According to him the most basic are the biological drives such as hunger, fatigue or need for oxygen. In the school setting it is for the teacher to pay attention and make sure that children come to school with a good night's sleep and an adequate breakfast. He/She should provide break to give them rest, relax their muscles and go to the bathroom etc.

The next in hierarchy is physical and psychological safety. In schools where teachers are threatening and resort to corporal punishment, they inhibit their psychological growth. Such teachers may also be psychologically threatening by calling the pupils stupid or giving similar labels.

The third hierarchical level is the affectional level. It includes friendship and a feeling of belongingness as well as love and intimacy. Many children's affectional needs are frustrated because of their lack of social skills, talents, socio-economic standing etc. Teachers should find ways to provide them group acceptance and positive regard and thus develop positive attitudes toward the school situation and to motivate them to learn.

The fourth level, the need for self-esteem or status, refers to recognition of one's worth as an individual. There are all kinds of children in school and the teacher should find ways to help those who lack self-esteem by providing special situations in which they can outshine others. For example, a boy who is physically not so strong and has no chances in athletics may do very well in mimicking or some thing else not requiring physical strength.

Reinforcers in case of the above-mentioned needs come from outside the individual i.e. from the environment. Such maintenance-directed motives are mostly socially acquired. Then on, the individual moves to growth-directed motivation i.e. self-actualization and desire for knowledge.

Maslow characterized self-actualizing people as having attributes such as clear-perceptions and acceptance of reality; ability to recognize their own shortcomings and

those of others; and desire to bring together reality and idealism. Self-actualizing people are in satisfaction from within themselves, experience and appreciate mysteries of life, identify with human beings in general and have profound interpersonal relationships. Attainment of self-actualization is very infrequent.

However, it is for the school and the teacher to help attain self-realization by giving pupils freedom for creativity, for exploration, both of self and that of environment. Carl Rogers' 'freedom to learn' is relevant in this situation as well as in his client-centred approach. Exploration, discovery learning, creativity- such terms go with intellectual independence which is the very crux of child-centred education, both in the cognitive and affective domain.

Behaviouristic Strategies in Affective Domain :

A traditional way of looking at affective behaviour is the behaviouristic or "learning" point of view. There are many learning theories but the most important among them are classical and operant conditioning social learning theory and cognitive theory. Strategies such as those adopted by humanists tap directly the intrinsic motivation to learn in a school situation. On the other hand motivation to associate with some idea, activity or object can be entirely extrinsic or external and serve as good a purpose. Cognitively based

materials and their learning have implications from affective point of view. In other words the subject-matter may be accepted positively or rejected because it serves as aversive stimulus to the learner. Pleasant emotions associated with learning stimuli are more likely to further the work of the teacher and the school through inducing positive motivation to attend and learn.

Schools should, therefore, cultivate pleasant emotions such as joy, excitement, love and friendship and pleasure in school related tasks. Anger, hostility, fear and anxiety should be alleviated.

Classical Conditioning Strategies :

There is a lot of scope for the teacher to introduce desirable conditioning in the school and classroom, using classical conditioning methods. In order to make the classroom and school work interesting and pleasant, the teacher should make efforts to provide an attractive physical environment consisting of colourful pictures, carpeting, flowers and books and equipment which stimulate pleasure interest and effort. The teacher himself/herself can be a pleasant stimulus if he is able to create an appropriate emotional tone of the class. Thus his appearance, voice, sense of humour, accepting attitude and other positive personal qualities induce desirable emotional responses. Then learning activities can be fun rather than some

dreary learning material. Physically unsafe and psychologically threatening situations can be avoided as they would enhance the fear, frustration or anxiety.

Operant Conditioning in the Affective Domain:

Operant conditioning is based on the belief that behaviour is governed by its consequences or by expectations of its consequences. According to this theory most of the controls are in the environment; i.e. we act and are then rewarded or punished by elements in the situation, causing our behaviour to recur, or not as the case may be. Thus, through conditioning experiences, we anticipate reward (pleasure) or punishment (fear, anxiety, depression). A feeling tone and an attitude are developed as the result of a given behaviour.

Skinner (1971) explains that values, too, are the result of operant conditioning, in the sense that they accompany behaviour and are essentially generalizations of our expectations of the effects of our behaviours. If that is so, changing behaviour appropriately will have positive consequences, and we will value the changed behaviour. We can presume a value change when in the event of external rewards being withdrawn the changed behaviour still persists. Hence teachers, after having induced certain reinforcements and established certain behavioural and value change, may want to make sure of the intrinsic nature of the belief in that particular value.

Once one has formed a value, acting in accordance with that value may be reinforcing in itself. Actions are continually monitored and this experience may lead to pleasure or disgust depending upon the ability to meet or fail the set standards. Levels of reinforcement range from concrete, through social, to attaining one's values. Carefully planned programme ^{of} reinforcements lead in the long run for the child to find value in his work, enjoy success, develop an appropriate value system, and thereby reinforce himself for his efforts. In the words of Allport (1961) he attains 'functional autonomy'. This is termed in operant-conditioning as 'self-reinforcement'.

Taxonomy of Educational Objectives: Affective Domain

According to Krathwohl et al (1964) values may be indoctrinated, modelled and reinforced. Whatever the approach being followed, it seems desirable to have a rational scheme for exposing pupils to the value-laden situations so that they internalize the values and other affective behaviours which are ~~universally~~ accepted to meet not only the social ends, but are also conducive to pupil's personal development. The taxonomy propounded by Krathwohl et al portrays a continuum of internalization of affective attributes. Thus in the beginning of one's experience one can be only peripherally involved with a particular object or idea; that is one can

be aware of the existence of that object or idea. Further along the taxonomy it is possible to become more deeply involved, as in responding to the object or idea, developing positive feelings for it or even making it a whole way of life.

The continuum of internalization moves along five major categories of (1) Receiving (2) Responding (3) Valuing (4) Organizing and (5) Characterizing by a Value Complex. Thirteen substages have been identified by Krathwohl et al which range from (i) Awareness at the lowest level to (ii) Willingness to Receive (iii) Controlled or Selected Attention (iv) Acquiescence in Responding (v) Willingness to Respond (vi) Satisfaction in Response (vii) Acceptance a Value (viii) Preference for a value (ix) Commitment (x) Conceptualization of a value (xi) Organization of a value system (xii) Generalized set, and (xiii) Characterization. The categories and sub categories on the continuum encompass dimensions such as interests, appreciations, attitudes, values, and personal adjustment.

An illustration of the process of acquisition of affective behaviour along the taxonomy is in line here. In dealing with the 'problem of pollution' for example, the students, to begin with, will be simply made aware of the words and concepts, leading to an arousal of their interest in the problem as such. Then, they may be willing to listen to a lecture or discussion

on the topic leading to still more interest as to try to read some literature on the topic, and at still higher level, may concentrate on this study to the exclusion of other choices.

At the responding level, the students form an opinion and take a stand on the issue, starting at the beginning level with acquiescing to the teachers stand, to be followed in due course by taking a position against pollution and expressing his conviction.

At the third level student has internalized his own position even more. He now accepts the need for managing the environment, prefers to engage in related activities over some others and even feels committed towards it. By this time he has his own point of view.

At a still higher level, he will be definite about his position with regard to his commitment to the issue of management of environment in relation to his hierarchy of values and will get involved with other related issues. Eventually he may generalize his value to the extent of becoming totally involved and end up in a life career in the same field.

Krathwohl's taxonomy can be used both as a teaching-learning model for affective objectives laid down in curricula as well as a model to be used by teachers in helping the

pupils in self-awareness, self-exploration and self-conviction. The pupils can be selective regarding the interests and activities to be pursued by them depending upon the initial appeal after being exposed to value-laden and emotionally charged stimuli. The teacher can have a keen eye for those who exhibit the motivation and potential to advance on the continuum of internalization towards richer and deeper involvement. The stimuli can then be planned and graded to suit the various maturity levels of pupils. In this way the taxonomy can become a useful tool for affective education.

Kohlberg's Moral Developmental Stages

Kohlberg (1971) influenced by John Dewey and Jean Piaget, postulated cognitive developmental series of stages of moral development. According to him the stages follow the same order in all the children but the rate at which they will attain mastery of various stages may vary. Also, one cannot teach a higher stage the child is ready for, but when the child is ready, one help stimulate him to move to the next higher stage. Kohlberg believes that we should stimulate children to move to higher moral stages, arguing that this is constitutional, philosophically justified, and socially useful (Kohlberg and Turiel, 1971). While it is recognized that various cultures may carry out moral values in different way, their ultimate values are usually considered to be similar. The

school should, therefore, aim at helping children to move from lower moral orientation to higher. Kohlberg's Moral stages include the progress of the child from pre-conventional level where the child is responsive to cultural rules because of fear of punishment through conventional level where the attitude is that of 'conformity' to social order perceived as valuable in its own right to the post-conventional, autonomous stage where the moral values and principles have validity apart from authority.

Value-Clarification

Coined by Rath, Harmin and Simon (1966) 'Value-clarification' strategy is an attempt at explaining the process of acquisition of value by children. This approach has implications for teachers for facilitating and structuring the value-learning situations. Rath and his associates believe that a value must be freely chosen. Such choice implies that alternatives must be explored, freedom of choice provided, and the learner permitted to live with his choices. According to Rath many youngsters do not know clearly what their values are, and they may be confused in this regard. As a result some students may become apathetic, frustrated, vacillating, or in other ways unable to function successfully.

The teacher, following this approach may adopt one or more of the several ways to help the pupil clarify his values.

The primary aim is to get him examine alternatives to project the consequences of the position he takes, and to decide how he feels about a given issue. He may then be encouraged to act in terms of his chosen values. One such technique is "informal encounter with pupils". A teacher following this strategy may raise a passing question to a pupil's expressed feelings about something. For example, if a student, at the verge of deciding his future courses of study expresses a desire to study Fine Arts, the teacher may help him consider how strongly, he feels that way, whether he knows about other possibilities, and what reasons he has for his decision, and so on. This will stimulate the student to think through his decisions before he implements them.

Some other strategies such as use of anecdotes to represent certain values to elicit pupil's reactions, 'value-sheets' asking students to arrange values in a hierarchy, role-playing to explore the extent of identification one feels with character or idea etc. can be useful in this regard.

The use of value-clarification techniques demands a psychologically safe classroom in which children feel free to hold values that may be different from those of other children or of the teacher. Rogers' Client-Centred approach which advocates genuine respect for the pupil and his views seems useful as an implementation strategy. The classroom atmosphere is non-threatening and trust is built-up between teacher and

child. The strong teacher will not feel threatened in face of disagreement and will at the same time be tolerant and non-coercive.

Fraenkel's Value-Developing Strategy

Jack R. Fraenkel (1969) used an approach that is both similar to and different from Raths. Fraenkel concentrates on the question what values do we want in our students and how can they be developed. He believes, since values are learned, schools should be concerned with how they are learned- accidentally or as planned. Accordingly, in teaching values, it becomes necessary to define more accurately what is meant and how an accepted value might be seen in actual behaviour. For example, a given value (dignity and worth of others (Fraenkel 1969) may be manifested as follows :

'Waits' until others have finished speaking before speaking himself (does not interrupt others), and

'Encourages' everyone else in a discussion to offer his opinion (does not monopolize the conversation), etc.

In 'Value-developing strategy' certain instructional objectives are used to present an anecdote for the children's consideration. The character in the story is made as 'real' as possible, so that children can "identify" with him; he faces two or more conflicting alternatives, and the students are asked to state alternatives open to him, suggest possible things

that could happen to him, state what they would do if they were in place of that character, and how they would feel about it. Pupils are not only asked to analyze alternatives, but to predict consequences and examine feelings. By trying to empathize with the character in the story, Franekal believes, the student will experience affect resulting in tangible outcomes. In this approach, as in Raths, the teacher does not suggest alternatives but encourages the child to think of alternatives.

Role-Reversal

Techniques given above are all related either to discovering one's 'values' or learning and acquiring values by getting children think about what they believe, why they believe it and what the consequences of such beliefs might be. It is also intended to get children express their feelings. Role-playing and role-reversal are some of the direct attempts at providing emotional experiences and understandings.

Role-reversal consists of asking someone to play the role of another person whose views are dissimilar to his own. The learner is, thereby, involved in a more realistic situation than simple discussion. He is able to get the feel of how he and others are behaving and why they behave in those ways. The situation may be contrived or it may develop informally. For example, for giving the child an understanding of how a child who has some physical handicap or a child with limited financial

resources at home feels, the teacher may evolve certain themes concentrating around such children and ask children without such limitations to take on their roles and interact : Children will then learn values like dignity of individuals in their own right, non-discrimination etc. A creative teacher can deal with many attitudes and prejudices in a meaningful manner, involving ^{the} children not merely at intellectual level but also tapping their emotional resources.

To conclude : The lopsided curricula in our schools, neglecting the affective component of pupil's development do not serve the required needs of an individually and socially geared educational programme. Affective outcomes of education are not only an end in themselves but also serve as motivational means to classroom learning and to tap the human potential, thereby aiding in its nurturance by using carefully chosen affective reinforcement contingencies. Literature in affective domain covering at least a century by now is replete with theoretically sound and empirically valid strategies and procedures for infusing a spirit of learning and discovery of self, and of striving to realize one's inherent cognitive and affective potential. It remains, however, for the school and the teacher to imbibe the basic concerns regarding the affective domain in their teaching and curricula.

REFERENCES

- Adar, L. A Theoretical Framework for the Study of Motivation in Education. (The Hebrew University, School of Education, Jorusalem) In Hebrew.
- Ansubel, D.P. et al. Educational Psychology: A Cognitive View (Holt, Rinchart and Winston, New York).
- Bloom, D.S. Human Characteristics and School Learning. New York: McGraw Hill, 1976.
- Combs, A.W. & Snygg, D. Individual Behaviour (Rev.Ed) New York: Harper & Row, 1959.
- Deci, E.L. Intrinsic Motivation, New York : Plenum Press, 1975.
- Dewey, J. Lectures for the First Course in Pedagogy, (Unpublished), No.1, 1896.
- Fraenkel, J.R. Goals for teaching values and value analysis. Journal of Research & Development in Education, Vol.13, No.2, Writes 1980, 92-102.
- Hofstein, A.; & Kempa, R.F. Motivating Strategies in Science Education: Attempt at an Analysis. Eur. J.Sci.Education, 1985, Vol.7, No.3, 221-229.
- Hunt, J. McV. Information Processing and Motivation in O.J. Harney (Ed) Motivation and Social Interaction. New York : Ronald Press, 1963.

- Izard, C.E. The Face of Emotion. New York. Plenum Press, 1977.
- Kohlberg, L., and Turiel, E. "Moral Development and Moral Education", in Lesser, G.S. (ed). Psychology and Educational Practice : Glenview, Ill. Scott, Foresman, 1971.
- Kohlberg, L. "The contribution of Developmental Psychology to Education-Examples from Moral Education". Educational Psychologist, 10 (1973), 2-14.
- Krathwohl, D.R., Bloom, B.S. & Masia, B.B. Taxonomy of Educational Objectives : The Classification of Educational Goals, Handbook II : Affective Domain, New York: David McKay Co., Inc., 1964.
- Maslow, A.H. Motivation and Personality. New York: Harper & Row (See Ed.) 1970.
- Messick, S. Potential Uses of Non-Cognitive Measurement in Education. J. Edu. Psy. 1979, Vol. 71, No. 3, 281-292.
- Piaget, J.H. The Moral Development of the Child. New York : Free Press, 1948.
- Ringness, T.A. The Affective Domain in Education. Boston: Little, Brown and Company, 1975.
- Raths, L.E. Harmin, M. & Simon, S.B. Values and Teaching : Working with Values in the Classroom. Columbus, Ohio: Charles E. Merrill, 1966.

Rogers, C.R. Client Centred Therapy. Boston: Houghton Mifflin,
1951.

Rogers, C.R. On Becoming a Person. Boston: Houghton Mifflin,
1961.

Spielberger, C.D. Conceptual and methodological issues in
anxiety research. In C.D. Spielberger (Ed).

Anxiety: Current trends in Theory and Research.
New York : Academic Press, 1972.

Skinner B.F. Beyond Freedom and Dignity. New York : Alfred A.
Knopf, 1971.

Tomkins, S.S. Affect Imagery, Consciousness. The Positive Affects
(Vol.1) New York : Springer, 1962.

Tomkins, S.S. Human Emotions, New York : Plenum Press, 1977.

White, R.V. Motivation Reconsidered : The concept of Competence.
Psychological Review, 1956, 66, 297-333.

TITLE OF PAPER : DEVELOPING NATIONAL IDENTITY IN
INDIAN CHILDREN

: Amar Kumar Singh*

Pluralism in India : Strength and Weakness

1.1. Pluralism in India : Strength

Human civilization has been broadened and enriched by cross-fertilization of ideas. Openness to new innovations, irrespective of their origins has been the secret of progress and development; insularity has been deadening. The progress of science has been importantly influenced because of its being hybrid. Improvements in plants and animals as well as in societies and cultures are influenced by the interaction of dissimilar and heterogeneous elements.

India is a plural society. It has produced a unique synthetic mosaic culture, drawing from Hinduism, Islam, Christianity, Sikhism and modern western civilization. Thus, the Indian psyche is shaped by the Buddha and Christ, Shankara and Satre, Shakespeare, Kalidas and Galib, and Aryabhatt and Einstein. It has the proud

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inheritance of Buddhist Ajanta and Ellora, magnificent Hindu temples of south India, Taj Mahal and Redfort of the Muslim period and the scientific and technological advancements of contemporary western civilization. The interaction of the ancient Hindu, medieval Muslim and the modern western civilization have produced deeply humane persons like Gandhi and Nehru, Vivekanand and Aurobindo and Tagore and Iqbal. Many tears have been shed on the spiritual distress, unhappiness and emotional rootlessness of the marginal man, whose arms are weak because his mind is divided, whose hands are powerless because his soul is in turmoil. Nehru considered himself to be a queer mixture of the East and the West, out of place everywhere, at home nowhere. The marginal man is :

Wandering between two worlds, one dead,
The other powerless to be born
with nowhere yet to rest his head.

Despite the spiritual stress and strain on the individual, or perhaps because of it, the marginal man is also the harbinger of a synthetic and more advanced civilization. As Park(1920) had suggested long time ago, "It is in the mind of the marginal man that the conflicting cultures meet and fuse. It is, therefore, in the mind of the marginal man, that the process of civilization is visibly going on". Many Indian intellectuals have not been split-personalities, torn between tradition and modernity (Shils,1961). The Indian intellectuals have stood for

assimilation and synthesis of Western and Indian values. Though critical of certain inadequacies and perversities of the Indian society, and though respectfully admiring the marvels of Western science and liberal humanism, the Indian intellectual did not abandon their Indianness. Gandhi reflects this sentiment emphatically: 'I want the culture of all lands to be blown about the house as freely as possible. But I refuse to live in other people's houses as an interloper, a beggar or a slave". Vivekanand, in a more mundane and earthly but delightfully witty manner, described the essentials of a good food : a Muslim dish cooked in a Hindu kitchen and served in the European style. Cultural marginality is not a curse, but indeed is a blessing (A.K. Singh, 1963, p.34).

1.2. Pluralism in India : Social Stratification

The main factors of Indian social stratification associated with the intergroup relation and social tension, are religion, language, caste and tribe, income and sex.

Religion

The Hindus (84.54%), the Muslims (11.35%), the Christians (2.43%) and the Sikhs (1.97%) constitute the main religious groups in India (Table 1). The overall figures of the religious groups in India conceal several important points. Firstly, despite the overwhelming majority of the Hindus in the country as a whole, they are out numbered by the Muslims in Jammu and Kashmir

(64.19%), by the Sikhs in the Punjab (60.17%) and by the Christians in Nagaland (80.19%) and Mizoram (83.80%) significantly. The anti-Indian separatist movements have emerged in these states with sensitive international borders. Secondly, though the Muslims constitute a small minority (11.35%) of the total Indian population in terms of absolute numbers, they make India one of the four largest Muslim countries of the world along with Indonesia, Bangladesh and Pakistan, and, interestingly, the Indian Muslim population is larger than that of Pakistan. The percentages of Muslims in several towns are much higher than their national average. (Muslim India, 1983, 1, 64-65). In 37 cities, scattered in different parts of the country, the Muslims constitute more than 20% of the local population.

Language

Linguistic identity has been another important factor creating intergroup conflicts in India. Of the fourteen major

Table 1

Population of India by Religion (1981)*

	Number (Mn)	Percentage Distribution
Buddhists	4.7	0.7
Christians	16.2	2.4
Hindus	549.8	82.6
Jains	3.2	0.5
Muslims	75.5	11.4
Sikhs	13.1	2.0
Others	2.8	0.4
Total	665.3	100.0

* Excluding Assam

Source : Census of India (1981)

languages, Hindi, of course, is spoken by a clear vast majority of 162.6 millions but other languages are also spoken by very large populations, such as Bengali (44.8Mn), Telgu (44.8 Mn), Marathi (42.3 Mn), Tamil (32.7 Mn), Urdu (28.6 Mn), Gujarati (25.9 Mn), Malayalam (21.9 Mn), Kannada (21.7 Mn), Oriya (19.9 Mn) and Punjabi (16.4 Mn) (Table 2).

Caste and Tribe

The scheduled castes (SC) and the scheduled tribes (ST) constitute 23.5% of the total Indian population (Table 3). They are the most backward social groups in India with high incidence of illiteracy (Table 4) and poverty (Table 5).

Income

The pervasive poverty in India is indicated by its low cut-off point of poverty-line which is rupees 107 and rupees 122 per capita permonth in rural and urban areas respectively. Despite this low level of poverty line, 37.40% of the total Indian population was living below it in 1933-84. Majority of scheduled castes (51%) and the scheduled tribes (57%) lived below the poverty line. (Table 5, P.Singh, 1986). The distressing poverty is embittered by inhumane social injustice. Top 10% of the rural household possessed 51% of the assets in 1971 (Bandyopadhyay D. 1985). A decade ago, in 1961, the percentage was also similar (51.4%) (Table 6). Top 30% of the population in rural India accounted for 52% of consumer expenditure in 1977-78, compared with 15% for the bottom 30%. This situation has not changed much since 1965-66 (Table 7).

Table 2

Principal Languages Spoken (1971)

Language	Persons speaking (Mn)	Language	Persons speaking (Mn)
Assamese	9.0	Marathi	42.3
Bengali	44.8	Oriya	19.9
Gujarati	25.9	Punjabi	16.4
Hindi	162.6	Sindhi	1.7
Kannada	21.7	Tamil	32.7
Kashmiri	2.4	Telgu	44.8
Malayalam	21.9	Urdu	28.6

Source : Tata Services Limited (1986). Department of Economics and Statistics. Bombay House Bombay, Statistical Outline of India (1986-87). Bombay: The Tata Press.

Table 3

Scheduled Caste (SC) and Tribe (ST)

Population in India (1981)

	Total Population	% Total Population
SC	104,754,623	15.75
ST	51,628,638	7.76
Total SC/ST	156,383,261	23.51
General Total Population	665,287,849	

Source : Census of India (1981)

Table 4

Literacy, Ethnicity, Sex and Rural-Urban Residence

		Total	Male	Female
<u>Scheduled Castes</u>	Total	21.38	31.12	10.93
	Rural	18.48	27.91	8.45
	Urban	36.60	47.54	24.34
<u>Scheduled Tribes</u>	Total	16.35	24.52	8.04
	Rural	14.92	22.94	6.81
	Urban	27.93	47.60	27.32
<u>General Population</u>	Total	36.23	46.89	24.82
	Rural	29.65	40.79	17.96
	Urban	57.40	65.83	47.82

Source: Census of India (1981)

Table 5

Percentage of Persons Below the Poverty Line

		Scheduled Caste	Scheduled Tribe	Rest	All
Rural	1977-78	64.40	72.43	45.43	51.20
	1983-84	53.30	58.40	35.10	40.40
Urban	1977-78	54.27	52.59	36.11	38.20
	1983-84	40.40	39.90	27.10	28.10
Combined	1977-78	63.14	71.43	43.07	48.30
	1983-84	50.92	57.15	32.62	37.40

Source : P.Singh (1986). Trends in Poverty. Paper presented at the Seminar on Exploring India's Development : Perspectives for the Year 2000. Indian Association of Social Science Institution, New Delhi, May 20-22, 1986.

Table 6

Distribution of Assets in Rural India

Category of Households		1961	1971
Lowest	10%	0.1	0.1
Lowest	30%	2.5	2.0
Top	30%	79.0	81.9
Top	10%	51.4	51.0

Source : Bandyopadhyay, D. (1985). An evaluation of policies and programmes for alleviation of rural poverty in India. In Rizwanul (1985) ed.). Strategies for alleviating poverty in rural Asia. Bangkok : International Labour Organisation, 104. Based on Sixth Five Year Plan.

Table 7

Distribution of the Household Consumer

Expenditure in Rural India

Category		1965/66	1970/71	1972/73	1977/78
1. Bottom	30%	15.1	15.4	15.4	15.0
2. Middle	40%	34.3	35.1	33.7	33.1
3. Top	30%	50.6	49.5	50.9	51.9

All estimates are at 1977-78 prices.

Source : Bandyopadhyay, D. (1985). An evaluation of policies and programmes for alleviation of rural poverty in India. In I. Rizwanul (Ed.). Strategies for alleviating poverty in rural Asia (p.104). Bangkok : International Labour Organisation. Based on Sixth Five Year Plan.

Sex

Sex prejudice and discrimination is now emerging as an important factor of social tension in the Indian society because of the growing political consciousness in women. There are numerous evidences of low status of women in the Indian society. The life expectancy of women (51.8 years) is lower than that of men (52.2 Years). The literacy rate for women (24.88) is lower than that for men (26.74). The sex-ratio is adverse to women : 935 women to 1,000 men. The female infant mortality (131) is higher than that of male (123). Female children are discriminated against in health and nutrition (Khan,1985; Reddy,1986). Preference for son is shockingly confirmed by the fact that almost all women, irrespective of social class and educational levels, opted for abortion of a female foetus (Jayaswal,1987). In a survey of 8,000 pregnant women, all except one, opted for abortion with the knowledge that they had conceived a female child. Singh (1980) had found that sex-prejudice was stronger than religious, caste and class prejudices. This was irrespective of religion, caste, ethnicity, rural-urban residence and education. The growing incidence of dowry deaths is another evidence of sex prejudice and discrimination.

1.3 Pluralism in India : Weakness

The very factors which have given strength, variety and richness to the Indian society have also been its weakness. Distressingly, the intergroup relations are getting increasingly.

embittered and violence is increasing dangerously in a spiral. The number of communal incidents, persons killed and injured during 1954 to 1985 are (Table 8, Rajgopal, 1987) indicators of a continuing social disharmony. The number of incidents and persons injured have been increasing steadily since 1976. The disturbing recent violence in Punjab is still to be fully documented. The atrocities towards scheduled castes and tribes have also been increasing (Table 9). The recent incidence of rural caste massacres are, like Naxalism, indicators of deeply disturbed socio-economic arrangements. Almost all over the country, the intergroup relations are strained, resulting in violent conflicts based on religion, caste, ethnicity, poverty and sex. The country is virtually sitting on a volcano. Almost all ethnic groups are interlocked in bitter and violent conflicts: the rich and the poor in all parts of the country, the Hindus and Muslims in several parts, the Hindus and Sikhs in the Punjab, the tribals and non-tribals in Bihar, and the Christians and non-Christians in Kerala.

Despite India's deep and unshaking commitment to the ideals of secularism and intergroup tolerance, these ideas have remained elusive and distant. Though, all political parties in India have repeatedly confirmed their commitment to the ideals of national integration, the debate on it in the Parliament had to be adjourned because of lack of quorum (The Times of India, 29.4.1981). The gravity of the situation is being increasingly realised because as A. K. Singh (1985a) has

Table 8
Number of Communal Incidents, Persons Killed and Injured (1954-1985)

Sl. No.	Year	No. of Incidents	Persons Killed	Persons Injured	Sl. No.	Year	No. of Incidents	Persons Killed	Persons Injured
1.	1954	84	34	512	17.	1970	521	298	1607
2.	1955	75	24	457	18.	1971	321	103	1263
3.	1956	82	35	575	19.	1972	240	69	1056
4.	1957	58	12	316	20.	1973	242	72	1318
5.	1958	40	7	369	21.	1974	248	87	1123
6.	1959	42	41	1344	22.	1975	205	33	890
7.	1960	26	14	262	23.	1976	169	39	794
8.	1961	92	108	593	24.	1977	188	36	1122
9.	1962	60	43	348	25.	1978	230	110	1853
10.	1963	61	26	489	26.	1979	304	261	2379
11.	1964	1070	1919	2053	27.	1980	421	372	2691
12.	1965	173	34	758	28.	1981	319	196	2613
13.	1966	144	45	467	29.	1982	470	238	3025
14.	1967	198	251	880	30	1983	500	1143	3652
15.	1968	346	133	1309	31.	1984	476	445	4836
16.	1969	519	673	2702	32.	1985	525	328	3665

Source : Rajagopal, P.R. (1987). Communal violence in India. New Delhi :
Uppal Publishing House.

Table 9

Atrocities Against Scheduled Castes (SC) and Tribes (ST) in some Selected States (1967-1981)

Year	Scheduled Castes	Scheduled Tribes
1967	2339	843
1968	2241	871
1969	2253	900
1970	2701	1075
1971	3136	1119
1979	13975	2134
1980	13866	1578
1981	14308	3340

Source : (i) Data for 1967-1971
B. Venkataraman and D. Venugopal. (1977)
'Public order', in S.C. Dube ed.,
India since Independence, New Delhi,
Vikas, 461 & 462.

(ii) Data for 1979-1981
Report of the Commission for Scheduled
Castes and Scheduled Tribes, New Delhi
Ministry of Home Affairs, Government of
India.

suggested :

Indeed, a great deal is at stake, nothing less than the future of the Indian polity and society. The situation cannot be allowed to drift dangerously. The nation demands an effective intervention before we reach the end of the precipice. National integration, inspired by secularism, is an essential pre-condition for socio-economic development of the country. Commitment to secularism is not merely because of political considerations. Secularism is more than a political concept; it is the essence of civilized living. Abandoning secularism means abandonment of civilisation itself. (p.3).

II

Explanations of Social Conflict in India

There have been two broad explanations of social tension and intergroup conflicts in India and elsewhere: The psychological and socio-economic. The psychologists have tried to explain social tensions and conflicts by attitudinal and personality variables. "There is a blind-spot on non-psychological factors affecting psychological aspects of social tension (A.K.Singh,1986, p.191)

The importance of non-psychological factors in the formation of minority group identities, their group-image, their attitudes to other social groups, and their socio-political behaviour, are too obvious and visible to escape the attention of any intelligent and informed person, except some psychologists, who, obsessed with professional narcissism, insist on psychological explanations alone for all psychological variables (A.K.Singh, 1986, p.191).

Psychology has used personality as an explanation of prejudice and discrimination beginning with the famous work, 'The Authoritarian Personality' (Adorno et al, 1950). The argument can be summarised as follows :

Prejudice is rooted in personality, which is authoritarian in nature, which, in turn, is produced by authoritarian child-rearing practices, which are more prevalent in low SES groups. There is a vicious self-perpetuating circle, the main connecting points being low SES, authoritarian socialization, authoritarian personality and prejudice. The socio-economic and political vested interests of the elites and the dominant groups, their exploitation and oppression of the socially disadvantaged groups, and the degree of political consciousness in the deprived groups are some of the important contributory factors to social tension in India that have escaped the notice of the psychologists (A.K.Singh, 1985-86, p.194).

The other explanation of intergroup conflict has been the socio-economic factors. Relative deprivation has been suggested as a factor conducive to intergroup tension (Naqvi, 1982; Tripathy & Srivastava, 1980). The rise in aspirations as well as political consciousness in the socially disadvantaged groups are likely to intensify the feeling of relative deprivation.

A.K. Singh (in press) has reviewed the literature on "Intergroup relations and social tensions in India" and has argued that the intergroup tensions in India are being increasingly explained more by socio-economic factors and less by religious factors. The importance of economic equality, demand for social justice, an assertion for political rights have been underlined by several authors (Ahmad, 1983; Dhanagare, 1983; Engineer, 1984; Thaper et al., 1981).

K.L.Sharma (1979) has emphasised this point :

The people were killed or persecuted not because they were Harijans and the actions of the landlords were not just 'atrocities'. The issues behind these happenings were struggles for minimum wages, the occupancy right of the share-croppers, and a challenge to the absolute feudal power of the landlords. Therefore, such atrocities could be against the non-Harijan proletariat as well as those belonging to the non-scheduled castes, the backward castes, the intermediate castes and even the upper caste proletariat (p.24).

III

Defining Indian National Identity

3.1. Indian National Identity : its components

Concerned with the increasing assertiveness of ethnic divides and cleaveages in the Indian society, a consensus of public opinion is building up about the necessity of inculcating and developing an Indian National Identity which will claim the first loyalty of the Indians and will subsume other ethnic identities. The Indian national identity need not, and does not, class with ethnic identities. It is not an either-or question. Each individual has a psychic hierarchy of loyalties and, therefore, for national stability, security and development, it is important that the national identity is stronger than other sub-national identities.

The Indian national identity, of necessity, has to be build on the commonness of all Indians. Therefore, religion, caste, ethnicity, language and culture do not provide the basis for the commonness. The political ideology does not also provide a basis because India has opted for a liberal democratic and mixed economic system. Though, the Congress, with its acceptance of socialistic-cum-capitalistic systems, has a majority in the Indian Parliament, the important states of Kerala and West Bengal are ruled by Communist Party (Marxists). Some other states are also ruled by regional

political parties, but they do not have any distinct political ideology. The components of the Indian national identity must be acceptable to all Indians.

In the Hindu philosophy God has been described as nati-nat, or "not this". Similarly, Indianness is not religion or ethnicity, not culture or language, and not one political philosophy.

By eliminating all the possible bonds of human groups, the Constitution of India emerges as the only common basis of Indianness and Indian National Identity. The Constitution of India reflects the cherished political, economic and social values of the Indian civilisation. The Indian Constitution is as much a civilisational document as it is a political one. The socio-economic and political ideals and goals of the Nation are incorporated in the fundamental rights and duties and the directive principles. The most important of these are listed in Table 10.

3.2. The Definition of Indian National Identity

The Indian National Identity (INI) can be operationally defined as acceptance of and commitment to the social, economic and political values enshrined in the Constitution of India.

IV

Developing Indian National Identity

4.1. Socialisation of Ethnic Identities

In India, as elsewhere in the world, the ethnic identities begin to emerge very early in childhood and crystallise by early adolescence. Several Indian studies on the development of religious and caste identities have confirmed this. (Jabbi, 1981; 1982; Khan, 1979; Prasad, 1973; 1976; Sharma, 1986;

Table 10

The Indian National Identity Test (INIT) : Themes

Note : FR = Fundamental Rights,
FD = Fundamental Duties
DP = Directive Principles

<u>Reference</u>	
<u>The Constitution of India</u>	<u>Themes</u>
	<u>Social</u>
FR 29	Right to conserve distinct language, script or culture.
30 (i)	Right of linguistic and religious minorities to establish and administer educational institutions.
FD 51 A (e)	To renounce practices derogatory to the dignity of women.
(f)	To value and preserve the rich heritage of composite culture.
DP 41	Right to education.
44	Uniform civil code for all citizens
45	Free and compulsory education till 14 years.
46	Promotion of educational and economic interests of SC/ST and weaker sections.

Reference

The Constitution
of India

Themes

Economic

- | | |
|-------|---|
| FR 16 | Equality of opportunity in matters of public employment. |
| 24 | Prohibition of child labour |
| DP 2 | To minimise the inequalities in income, eliminate inequalities in status, facilities and opportunities, not only amongst individuals but also amongst groups. |
| 39 | To secure adequate means of livelihood for all citizens, equitable distribution of material resources, elimination of concentration of wealth, equal pay for equal work for both sexes, protection of health. |
| 41. | Right to work; public assistance to unemployed, sick and disabled. |
| 42 | Just and humane conditions of work; maternity relief. |
| 43 | Provision for living wages, conditions for work ensuring a decent standard of life. |
| 47 | Raising the nutritional and health status and standard of life. |
| 48A | Protection and improvement of environment, forest and wild life. |
-

<u>Reference</u> The Constitution of India	Themes
<u>Political</u>	
FR 19	Freedom of speech, to assemble peacefully without arms, to form association.
FFD 51A	To abide by the constitution, and respect ideals and institutions, the national flag and the national anthem.
C	To uphold and protect the sovereignty unity and integrity of India.
DF 38(1)	State shall promote a social order in which social, economic and political justice shall permeate all institutions of national life.
51a	Promotion of international peace and security; encouragement of settlement of disputes by arbitration.

Sharma and Anandlaxmi, 1981; Singh, 1981; 1985a, b, 1986; 1987; Tewari and Misra, 1980, 1985; Vyas, 1973). The religious identities (Table 11) and prejudices (Table 12) of Hindu, Muslim, Christian and Sikh children become fully-blown by the age of 8-9 years. (Figure 1). The religious identity and prejudice against other religions develops with ignorance about other religious groups (Table 13).

The children are, therefore, the most important target group for the development of Indian National Identity. There is a positive correlation between the prejudices of the parents and their children. (Hassan 1983). Plainly speaking,

the development of Indian National Identity will involve a massive brain-washing campaign of the children and their parents, with audio-visual materials using the mass-media, because of the wide-spread illiteracy in the country.

4.2. Indian Institute for National Integration

Despite the realisation of the importance of developing Indian National Identity, there is little planned scientific intervention. The religious, ethnic and caste identities develop because of persistent influences of the family, the priest, and the cultural tradition. The influences for inculcating national identity are much weaker. The reminders of the common Indianness during the occasions of the Republic and Independence days are just not enough. The problem is so urgent, the task so complex and massive that only an independent Indian Institute of National Integration (IINI), with branches in each State can do justice

Table 11

Development of Religious Identity: Percentage of cases
Who Preferred Most their Own Group

Grade	Nursery	I/II	III/IV	V/VI	VII/VIII	IX/X	Total
Age in Years	4-5	6-7	8-9	10-11	12-13	14-15	
Hindu	85.18	70.53	84.18	81.02	85.85	85.68	82.07
Muslim	74.36	93.01	95.50	98.33	96.84	91.67	91.62
Sikh	63.87	88.68	97.84	93.17	97.67	95.84	89.51
Christian	88.01	96.50	98.67	95.51	94.84	97.17	94.95

N= 120 in each religious group, with 20 cases in each sample cell.
Source : Singh, A.K. (1985). From sectarian loyalties to the human identity, Future, 14, 23.

Table 12

Development of Prejudice : Percentage of cases with Lowest Preference for the Target Group of Prejudice

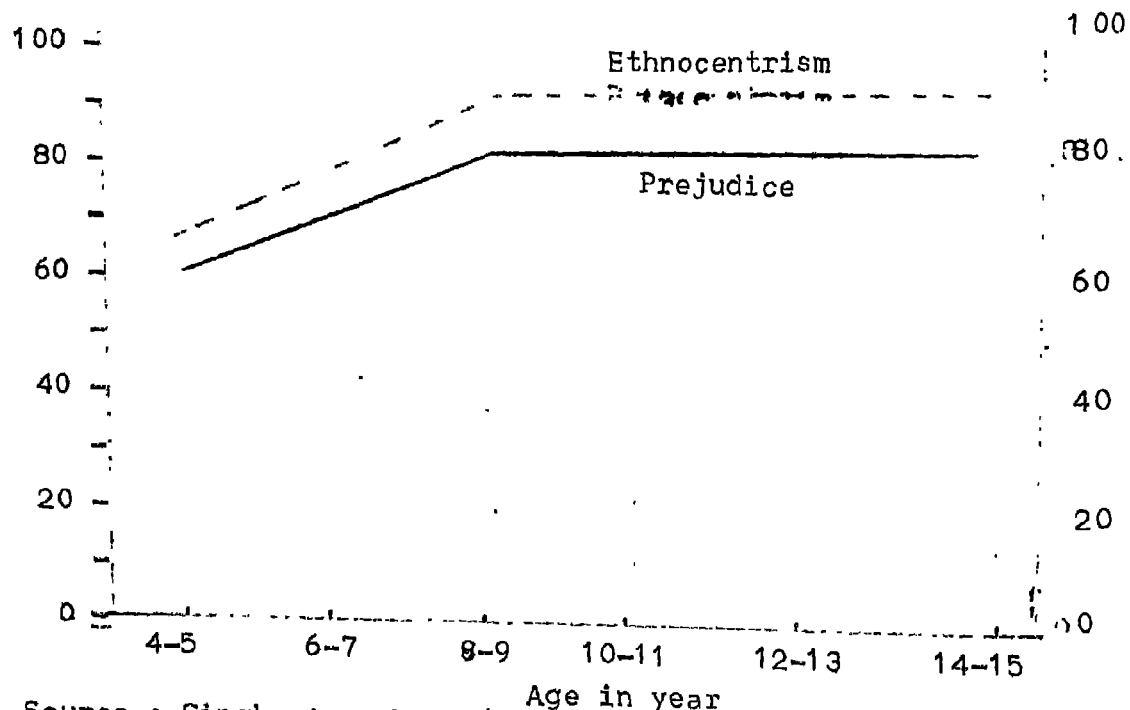
Grade	Nursery	I/II	III/IV	V/VI	VII/VIII	IX/X	Total
Age in Years	4-5	6-7	8-9	10-11	12-13	14-15	
Hindu	20.81	71.93	77.09	80.09	80.59	83.75	69.04
Muslim	62.60	85.91	84.42	89.24	80.59	87.41	81.70
Sikh	56.11	70.10	86.75	84.42	92.07	79.59	78.17
Christian	63.10	54.61	66.43	72.59	63.94	67.43	64.68

N = 120 in each religious group, with 20 cases in each sample cell.

Source : Singh, A.K.(1985). from sectarian loyalties to the human identity. Future,14,24.

Figure 1

Pattern of Development of Ethnocentrism and Prejudice



Source : Singh, Amar Kumar(1985). From sectarian loyalties to the human identity: Where do children come in Future,Spring 14,00.21-25.

Table 13

Religious Information of Age Group 14-15 years :
Percentage of Correct Respondents

Sample Group N	Hindu 120	Muslim 120	Sikh 120	Christian 120
Hindu	77	45	47	42
Muslim	15	47	15	14
Sikh	22	19	50	20
Christian	17	21	19	51

Source : Singh, A.K.(1985). From sectarian loyalties
to the human identity. Future,14,24

with it. The IINI will be a multi-disciplinary action research
organisation with the following objectives :

- (i) Conducting research on inter-group relations,
- (ii) organising discussions on problems of inter-group relations,
- (iii) Publishing journals and other literature to inform and educate public opinion.
- (iv) using the mass-media and the educational system to promote Indian National Identity.
- (v) Conducting training programmes, particularly for children, adolescents and the youth, and
- (vi) advising the government on problems of inter-group relations, based on expert studies.

References

- Adorno, T.W. et al.(1950). The authoritarian personality.
New York : Harper and Bros.
- Ahmad, I.(1983). The political economy of communalism in
contemporary India : A new perspective. Social Action,
33(4),443-452.
- Bandyopadhyay, D.(1985). An evaluation of policies and programmes
for alleviation of rural poverty in India. In I.Rizwanul
(Ed) Strategies for all eviating poverty in rural Asia
(pp.99-151). Bangkok: International Labour Organisation.
- Census of India. (1981). Series 1, Part II-B (II & III),
Primary Census Abstract SC & ST.
- Dhanagare, D.N.(1983). Peasant movement in India (1920-1950).
Delhi : Oxford.
- Engineer, A.A.(1984). (a) An analytical study of the Meerut
riot (pp 271-280) & (b) The causes of communal riots in
the post-partition period in India (pp.33-41). In A.A.
Engineer (Ed.). Communal riots in post-independence India.
Hyderabad: Sangam Books.
- Hassan, M.K. (1983). Parental influence on children's prejudice
Social Change,13(2), 40-46.
- Jabbi, M.K. (1981). Development of religious identity and
prejudice in Sikh Children. Social Change,12(4),20-27.
- Jabbi,M.K.(1982). Development of religious identity and
prejudice in Sikh school students... Unpublished doctoral
dissertation. Ranchi University, Ranchi.

- Jayaswal, M. (1987, October). Sex-prejudice: The cause of women's misfortune. The New Republic.
- Khan, H.R. (1979). A study of the development of religious prejudice in children. In S.N.Singh & H.R. Khan (Eds.). Prejudice in Indian society (pp.116-133). Varanasi: Rupa Psychological Centre.
- Khan, M.E. et al. (1985). Health practices in Uttar Pradesh: A study of discrimination against women. Working paper, 45. Baroda : Operations Research Group.
- Muslim India. (1963), 1, 64-65.
- Naqvi, N. (1982). Relative deprivation and attribution of blame in communal riots. Unpublished doctoral dissertation, Allahabad University, Allahabad.
- Park, R.E. (1928). Human migration and the marginal man. The American Journal of Sociology.
- Prasad, M.B. (1973). Development of caste awareness in children: A theoretical model. Journal of Social and Economic Studies. 1, 115-129.
- Prasad, M.B. (1976). Caste-awareness in Bihari children. Journal of Social and Economic Studies, 4(2), 293-300.
- Rajgopal, P.R. (1987). Communal violence in India. New Delhi: Uppal Publishing House.
- Reddy, V.E. (1985). Perspective on adult and continuing education. In S.C. Bhatia and M.K. Mehta (Eds.). Development-oriented adult education. New Delhi: Indian Universities Association for Continuing Education.

- Sharma, K.L.(1979). Class stratification and atrocities.
Seminar, 243, 22-25.
- Sharma, N.(1986). Development of prejudice in children. Bhopal:
Well Prints Private Limited.
- Sharma, A.& Anandlakshmy, S.(1981). Prejudice in the making :
Understanding the role of socialization. In D.Sinha (Ed),
Socialization of the Indian Children (pp.101-116). Delhi:
Concept Publishing Co.
- Shils, E.(1961). The intellectual between tradition and modernity:
The Indian situation. Supplement No.1 of Comparative
Studies in Society & History, The Hague: Mouton & Co.
- Singh, A.K.(1963). Indian students in Britain: A survey of their
adjustment and attitudes. London: Asia Publishing House.
- Singh, A.K.(1980). Women: The most disliked group-ranking of
prejudices. Social Change, 10(3-4), 3-9
- Singh, A.K.(1981). Development of religious identity and prejudice
in Indian children. In D.Sinha (Ed). Socialization of
the Indian child (pp.87-100). New Delhi: Concept.
- Singh, A.K.(1985a January). Developing secularism and national
integration in India. Presidential address, section of
Psychology and Education, 72nd Indian Science Congress
Association, Lucknow.
- Singh, A.K.(1985b). From sectarian loyalties to the human
identity. Future, 14, 21-25.
- Singh, A.K.(1985-86). Social psychology of social tensions in
India : A critique. Journal of Social Research, 28-29,
184-204.

Singh, A.K.(1986). The Psychology of minority groups in India.

Journal of Social and Economic Studies,3,191-215.

Singh, A.K.(1987). Developing secularism and national integration in India. Journal of Indian Education,March,7-15.

Singh, A.K. (in press). Intergroup relations and social tensions in India. In J.P.Pande(Ed) ICSSR Third Survey of Research in Psychology.

Singh,P.(1986). Trends in poverty. Paper presented at the seminar on Exploring India's Development: Perspectives for the year 2000. Indian Association of Social Science Institutions. New Delhi. May 20-22.

Tata Services Limited, Department of Economics and Statistics (1986). Statistical outline of India 1986-87. Bombay:Tata Press Limited.

Thapar, R., Mukhia, H., & Chandra, B.(Eds). (1981). Communalism and the writing of Indian history. New Delhi: Peoples Publishing House.

Tiwari, R.K. & Misra, G.(1980). Some observation on the development of caste awareness in Indian children. The Indian Journal of Social Work, 40(4),435-39.

Tiwari, R.K., & Mishra, G.(1985, January). A Study of development of caste awareness in children. Paper presented in Psychology and Education Section, 72nd Indian Science Congress, Lucknow.

Tripathi, R.C. & Srivastava, R.(1980). Relative deprivation and intergroup attitudes. European Journal of Social Psychology 2,313-318.

Vyas, S.K.(1973). The origin of prejudice in children. In T.E. Shanmugham(Ed), Researches in personality and social problems (pp.100-154). Madras: University of Madras.

TITLE OF PAPER: MANY SIDES OF CHILD CENTRED EDUCATION

Rais Ahmed*

If one thinks deeply about it, all good education has to be child centred, and vice versa. In fact, education cannot be centred on anything else, - not on the school, not on the teacher, not even on the curriculum. The question of "child centred education" has been raised in the National Policy on Education because the quality of education, particularly the quality available to the vast majority of students continues to be very poor. Schools don't have basic facilities, the requisite number of teachers is not there and those who are there often neglect their duty. The curriculum is also lop-sided. The circumstances are such that neither the child nor education itself are the basic concern of the system. Whatever benefit is derived from the system is due to sheer hard work of some students under the supervision of parents, and hardy intellect of others which survives all adversity. The intention of the Policy is to improve many facets of education and make relevant inputs. In this push, quality will be the centre piece, hence the attention to child centred education.

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It is a mistake, educationists have to admit, that under the best operating conditions in the schools, the curriculum has been rather arbitrarily based on certain notions of how much of history, or geography or mathematics or science a student of a certain class should know. The pressure of the disciplines has been there, even though a few attempts have been made to relate what is imparted to what the child is intrinsically capable of absorbing at a particular stage of mental development. The corresponding methods of teaching and examination have also been confined to the cognitive sphere, ignoring the affective domain or the humane side of the process called education. The pursuit of cognitive development has led to over reliance on "teaching" or "lecturing"; on more "objective" ways of testing, and really reducing the student to a mere roll number in the examination, or one-in-a-multitude of "present sirs" in the class room. The discipline oriented, "knowledge and understanding" based, impersonal system has, on the one hand failed to optimise learning and personality development, and on the other hand, it has led to a high drop-out rate of those who, in the first place, entered the system with marginal motivation - or found the courses irrelevant, and the teaching mechanical. Two categories of children who suffer the most are those with a non-conformist and creative bent of mind, and those who belong to the already deprived sections of our society.

The task of providing child centred education is therefore manifold. In addition to basic facilities, educational environment has to be made more attractive and cheerful, drudgery and dread often associated with it has to be removed. Buildings and classroom, apart from being clean, well-lighted and airy, could be adorned with suitable pictures, coloured posters and charts, and even buntings. Dry as dust lessons, far removed from the natural interests and curiosities of children, delivered mostly through "teaching" by either too careless or too stern teachers, have to give way to a more carefully designed curriculum delivered, in greater measure, by play and activity, out-of-class room exploration of plant and animal life and productive activities of various kinds. Teachers should not only be competent but also friendly, not grouchy and cantankerous but tolerant and sympathetic. It is only the teacher who can transform learning from a mechanical process to an enjoying experience, from a passive activity of students to an adventurous enterprise of constantly invading the unknown. The affective domain can be taken care of not so much by the content of the courses as by methods of interaction, it comes less from books or talk and more from activity either singly or in groups.

Another aspect of child centred education is its personalized attention. In large classes the individuality of the child is lost and it becomes one in a crowd, whereas learning pace and style as well as needs are personal. Not only do children have various problems at home or in the school but they come with their own private demons which have to be demolished, in the form of false values, superstitions and prejudices. Child centred education is not meant to always adjust to the child's way of thinking and its other limitations of horizon, but to lovingly pull it out of those ideas and sentiments which would interfere with its optimum performance in society. But, to care for and look after the individual child, in the context of large classes, has to be achieved at all cost.

5. We thus see that child centred education is not something which we can soon to achieve. It is a most desirable goal for which constant struggle would have to be made. As in most other educational programmes, the teacher plays the central role and his or her training, as well as his or her conditions of work, will have to be tremendously improved to make progress in this direction.

TITLE OF PAPER: "EDUCATION - AN ACTIVITY"

M.N.Kapur*

Observing the working of ever so many educational institutions, almost in every part of the world, gives one an insight into the type of practical education that would prove useful to young students of today. Therefore, this paper will neither be of an intellectual one nor of a highly academic nature

This will not make such difference, as on the whole, there would be papers of high academic and scholastic nature also. In comparison this paper may even seem a naive one.

But the fact remains that those individuals who have made a practical and permanent mark on the field of education had, and still have, educational institutions to test their own theories and concepts.

As mentioned above, this paper is based on practical experience -- of over 55 years -- in the field of education

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Education - an activity:

Education is an activity that involves the whole body, head, heart and the hand - the word 'hand' is being used to represent the other limbs of the body also.

It was not without reason that in Basic Education, Gandhiji made Craft of area "The Base" and exploration of "Physical Environments" and "Social Environments" as important inputs. The purpose was to make education as "realistic" in nature, as possible. Referring to the book "Educational Reconstruction" by Dr. Zakir Hussain - 1936".

This concept can be represented by a triangle - the base of this triangle being the craft of the area.

From Concrete to the Abstract:

As a matter of fact, one cannot teach anything to the child without touching one of these three. Put in "Educational language", it would mean helping the child to go from the concrete to the "Abstract" which is the accepted concept of education.

Personal experience:

I can talk about this subject with some confidence as, soon after my first visit to England for higher studies,

decades ago, I went specially to "Wardha", the original home of Basic Education, to understand the concept of the scheme. I went through a full training course on Basic Education. We were told to teach through several "crafts" such as, "spinning", "cardboard work", "agriculture", "leather work", etc. It was both interesting and realistic form of education.

Gandhiji's genius:

Gandhiji insisted that the product of the "craft" practiced, should be of a quality that could be sold in the market. This was not a mere statement of sentiment. There was a touch of genius behind it.

If what is produced in the school by the students can be sold in the market then many things become obvious.

1. I will give immense satisfaction to the student who has made the object.
2. He will continue to try and improve further the quality of his product.
3. In this process he will, automatically, even unconsciously, learn an useful vocation relevant to his village or adjoining area.

In course of time, this in turn, will mean students staying back in the area, instead of running to a town or a city to seek employment.

Mis-interpretation:

Mis-understanding, mis-interpretation and improper implementation of this remarkable scheme by various authorities, has led to almost abandoning it. Its new form is S.U.P.W. - Socially Useful and Productive Work. "Socially Useful" aspect of this scheme is being followed to some extent, even in towns, and cities, but the "Productive Part", the most important and well thought out component of the scheme, is almost missing. As a result of this, young persons from villages are converging to cities for jobs. This fundamental mistake has resulted in formation of unhygienic "Basties" or "Slums" around towns and cities, which present continuous and never ending social and even political problem.

Public Schools - point of view:

Long time ago a team of three persons, including G. Ramachandran, of Gandhigram, a well known authority on "Basic Education" was sent to 'Public' or 'Independent' Schools' throughout India, for persuading them to introduce "Basic Education" in their schools. As a member of the team, it was possible for me to get an insight into the thinking of the "Public School" authorities, vis-a-vis the concept of "Basic Education",

For them, it was enough to provide various types of activities popularly known as "Hobbies" for students. Beyond that nothing was required to be done. But if the school authorities had become fully conscious of the real concept of Basic Education, that is, POTENTIAL OF THE PRODUCT BEING SOLD IN THE OPEN MARKET and had encouraged student to pursue the activity even after school hours, it could become a vocation or a profession of students.

Personal Experience:

From personal experience, I know several cases in which this has happened in a particular Public School.

One important requirement is the recognition of the hidden talent in the student by the authorities; another to go out of the way to relax rules of promotion to the next class so that mere routine of the school may not kill the talent. To emphasise the point, it may not be out of place to mention three or four specific cases without mentioning names.

A young lady, deeply interested in "Batik" as a hobby, found ways and means of pursuing it to the professional level. She was able to study in a foreign country by the sale of her "Batik Work" and acquire a

a full degree in 'Art'. At the moment, she is a regular teacher of Art in a good school.

In an other case, lack of interest and efficiency in Mathematics was not allowed to come in the way of a student. He was allowed to pursue his hobby in school and encouraged to follow it up, at home also. Now he is a world famous personality on Instrumental Music.

Allowed to break the bondage of routine of school rules, another person is today "World recognised" authority in "Graphics". Yet another person is a professional Dancer.

Nothing very unusual:

This is not very unusual. It has been happening all over the world in many educational institutions. What is being emphasised is the conscious effort on the part of educational authorities to recognise talent and go out of the way to encourage it even at the cost of breaking normal routine of the school.

Students cannot be, and should not be 'FITTED' into a rigid iron frame of the school 'TIME-TABLE'.

If we collect, say 15 years old boys or girls, and observe them, they will not be of the same 'height', 'weight', 'looks' and 'intelligence'. In the same way

their interest will differ. Therefore, one of the basic aims of education should be to produce men and women of courage and confidence with 'individual talent' boosted to the maximum limit possible.

Learn continuously:

In one of my visits to foreign countries, for "learning to learn continuously from others experience", I visited a school where students were asked to go through Art & Craft and other similar activities for three to four weeks, before they were allowed to enter the routine academic class. Then the emphasis on such activities was continuous throughout the school career. The Head of the institution, stated that this practice had helped many a student to become better scholars and students in the school.

In an other school a big hall was available to students to carry out any experiment they would like to, in their free period, and before and after the school hours. According to the Headmaster this facility had helped some students to become, sort of, mind-inventors. Some of them continued their interest to a highly professional level.

Evening Games Vs Daring activities

Routine games, such as, Foot-ball, Cricket, Hockey, Basket Ball, Volley Ball, Boxing, etc. have become an accepted part of education practically all over the world and are played in most schools in the evenings.

Presuming this would be the case, a Housemaster of a school, when asked about students playing games in the evening, retorted that he would not like all his students to "chase leather" every evening. He was merely repeating the words of the HEADMASTER of the school.

Asked what else would the students be doing instead, he said that he and I would have to run for all we were worth, to observe it.

To be honest, I was surprised at this statement.

It was 9 p.m. He picked up the telephone to tell the student on "telephone duty" to inform the old lady living next to the school, that it was only a routine practice, and that she should not get alarmed.

There was always a student on telephone duty 24 hours of the day and 12 months of the year.

Having been assured of this, the Housemaster told the student on telephone duty, to announce to students

that such and house was on fire. As desired, the Housemaster and I ran as fast as we could to reach a particular spot. Some students were "flying past" us many clading themselves while running. By the time we reached the fire brigade centre, panting, the "Fire squad" students were on duty with engine running for immediate action. "We were ready, Sir, your orders, please".

I was stunned by their alertness and efficiency. Then the House Master announced that it was only "a practice" to show it to this gentleman from overseas - pointing to me.

Repeating the words of the school Headmaster, this is what he meant when he said that he would not like his student to "chase leather" all evenings.

No wonder the school had been winning "Fire Service Award" for the last several years, competing with professional "Fire Fighting Squad".

The school's "MOUNTAIN RESCUE SERVICE" where students would go to snow clad mountains, fully equipped to save a stranded mountain climber, was also noted in the area for the useful work it was doing.

To locate any drowning person, two students were always on duty even in school holidays to scan, with Binocular, sea near the school.

When asked if they have been able to save any drowning person, the Headmaster said that the main aim was carrying out the duty assigned or chosen, giving up even holidays for this duty - the life saving part of it was its bye-product.

Encouraging initiative and character building were the end product all such activities.

A mile long stone path leading to the sea front was made by the students themselves.

Wood needed by the school for fire place was collected by the students.

As it was cold, I was wearing a light overcoat. But the students were required to bathe with cold water at 4 a.m.! They were given warm water once a week to scrub themselves clean.

Asked how these students fared in society compared to other students, the Headmaster said "Not bad, not bad at-all - but it would be difficult to beat them in courage and initiative".

The whole school discipline was controlled by students themselves. There were no decorative badges for the student leaders of the school. They were as simply clad as any other student.

In another very well known school in an other country, the experience was very different, but rewarding.

The Principal remarked that I would have to go on tip-toe to see the working of the school. First I thought that it was a bit "overdoing things" but then I agreed.

I was greatly struck by the fact that the whole school was completely silent, that is, there was NO NOISE at all in the whole school.

Door of each class-room had a "peep-hole". One could watch the class working through that.

As I walked along softly, I saw some classes without teachers but students working quietly on their own. In some classes there were teachers but none was "LECTURING". They were explaining something softly to a student, sitting with them in the corner of the room. It was a remarkable experience.

I have been wanting to try this method but many teachers are sceptical about it. The usual approach is "lecturing" for 30 minutes or so to finish the course. Another, the need of two period of 40 minutes each for the "Science" practicals".

This does not mean that teachers in all schools do this. No, there are good schools also with 40 minutes period where less is taught at a time and doubts of students are cleared. Yet the course is finished on time.

Students Wish:

Many students themselves want longer period of 55 minutes or so, I have not yet given up the idea. They feel that if the teacher lectures in the class without clearing their difficulties, then who will clear their doubts - an expensive private tutor at home? Perhaps there will a compromise of the two suggestions - 55 minutes period for 4 days and 40 minutes period for 2 days catering for science practicals, etc.

Most Public Schools have morning assembly of about 10 to 15 minutes. The programme usually consists of prayers, orchestra and a song with some important announcement for the day.

:

Extended assembly of about an hour:

By reducing the number of periods in each subject the morning assembly in the school was working previously, was extended to 60/70 minutes. There are reasons for this.

By the time a book is published, it is, more or less, out of date, specially these days, when knowledge doubles itself in seven to ten years.

Besides, the routine of usual 'morning assembly' mentioned above .. (prayers, song, orchestra, etc.) .. item such as 'news of the day' was introduced.

Important news - Educational, Social and Political .. were collected by students and read out in the Assembly. The Housemaster, or the Headmaster/Principal would comment on it and elaborate upon it. As an example: "Gulf War" between Iran and Iraq, its significance for students. Is it not important for school students to learn that ego of a person or "self interest" of a country can have war **going on** for eight long years, killing lakhs and lakhs of people? It certainly is. Citizens of tomorrow, are in schools today. Similarly, terrorists activities in Punjab need explaining and moral aspect of killing of innocent people emphasised.

This is followed by a "Talk" chosen and prepared by students. Some very very interesting and informative talks have been brought by students. It does not matter very much if the student takes the help of a book, relative or the parents.

Again names of students absent or late, failing or scoring very high marks, are mentioned in the assembly. All this, including the prayers, would take about 20 to 25 minutes.

In the remaining time 30 to 40 minutes students engage themselves in ever so many activities; and competitions, Music, Handwriting, Recitation, Art and taking a cue from T.V.; "What is the good word", "General knowledge competitions"; "Dumb-Acting", etc. Students thoroughly such activities.

During the same time a group of outstanding sportsman get special coaching from experts and weak students special attention from their regular teachers.

In other words "the extended assembly period", if anything, is more useful than an additional regular period, specially when students have to listen to a 'lecture' from the teacher.

Most residential schools have "House System".

In nut shell it means vertical division of top five or six classes to form a unit or a "house". It is like having a home or a family with older and younger persons working together on every front, under the guidance of a Housemaster. Besides, the older students in the House would teach or help younger students to learn traditions of the "House", in studies, sports, social activities, etc. This system can be and was adopted successfully by a school which is mainly "a-day school".

Number of House Functions:

Normally, there are one or two "House Functions" in a school, even with several thousand students on its Roll. Is it fair to give chance to display their talent to a chosen few, even though everybody pays the same school fee? It is not. In view of this number of "House Functions" even upto twelve have been introduced in the school.

Students love to take part in them. The function generally consists of a 'song', 'orchestra', a play in English, and a play in Hindi, and a Dance item.

Some-time time is also given for an individual talent, generally taught at home - recital of a solo dance, tabla, sitar or musical instrument.

Along with the House Function, there is an exhibition of Art work, Craft, Sculpture, Batik, Tie & Dye, Block printing, Screen printing, Fabric painting, Madhubani, Potter painting, Kalamkari work, Project work on various topics, etc.

Every student of the House is engaged in some activity or work for the House.

Experience has shown that confidence of a student who does well on the stage is transferred to other areas also, even to routine studies. A pat on the back of a student who has acquitted himself/herself well on the stage has helped him/her not only pass in the subject he/she dreaded, but even to do well in it.

In any case his/her doing well in life gets more or less, assured by repeated appearances on the morning assembly activities.

In the field of acting the real purpose is not to make them "stage" or "screen" actors but to give them encouragement and confidence to meet challenges of life in any sphere students choose.

And yet it is interesting to note that the top three actors in the famous serial "Buniyad" were those who

encouragement in their "House Plays" and other activities of the "morning assembly". At that point of time they were not aware that one day their talent on the stage would earn them a place on the "Silver Screen".

In short encouragement to every child in every possible way, should be the main aim of a good school.

Principals Period:

In Delhi, a school Principal is required to take two periods a day. Very few Principals actually take it, or teach their subject, although it is mentioned in the time table.

The concept of Principals period was altered and it proved very useful and effective.

The Principal takes all sections of a class say four, at the same time in a hall. The purpose is general discussion on anything which the students want to know or understand. Questions varying from innocent ones from lower classes, to very difficult and subtle one from senior classes come up. Answers to questions are very often provided by students themselves. This provides insight into the working of the minds of students and what is

weighing on their minds and the possible solutions to solve the problem. This participation of students in running of the school is very important.

In this way, the Principal gets insight into ever so many situations. Besides, the teachers know that the Principal knows about their work or lack of it. It must be mentioned that it is not easy to manage such a period. It requires very subtle handling of the situation on the part of the Principal. But, everything said and done, it is a very useful period and experience worth having. It is a learning situation also.

S.U.P.W.

Although S.U.P.W. has missed the original concept of Gandhiji, we can still make something out of it, if we are serious. There are many activities, which, if pursued with a PURPOSE, can lead to vocation for many.

With college entry becoming difficult every day, there is all the more reason that we should take S.U.P.W. seriously. Activities like Batik, Tie & Dye, Block Printing, Photography, Sculpture, Pottery, Commercial Art, Fine Art, Graphics, Electronics and many such topics can be taken up. But it must be done with all seriousness for

vocational efficiency with a view to make a person self-sufficient.

Primitive man had to use all his systems of the body, specially nervous and muscular to make his living and defend himself from the enemy and the "Elements of Nature". Present day games can be called refined form of primitive man's fight for survival.

Discipline and Rules:

Man's desire to fight it out is provided by hockey, football, cricket, volley ball, basket ball, boxing and many other games. Only these are controlled by rules of the game so that primitive emotions of the man/woman may not take the upper hand.

School Hours:

All over the world, school hours are long, longer than what the Delhi Act has fixed. Fortunately, it is for Delhi State only - even then a second look is necessary as it requires a teacher to work for 1000 hours a year with 200 hours for remedial work in 220 days.

Only 4 years are needed to become a teacher, 3 years for graduation and one for training. This is less than

the time needed for most other professions.

No wonder far too many teachers apply when a post is advertised and teachers with better qualifications are ready to accept post requiring lower qualifications.

Schools should work for more than "eight hours". Then week ends can be used for extra reading and enjoyment.

In the end I would like to repeat that "Education mean activity".

TITLE OF PAPER: CHILD-CENTRED EDUCATION : SOME PERSPECTIVES

Iqbal Narain And Arun P.Bali*

The early years of a child's life are generally considered as the most important for his or her physical, mental and social, development. Initial life experience may enhance, expand, or inhibit his or her further development. The basic social instrument for helping a child realize the potentialities and develop them is education. There exists a pattern of educational activities in each country, designed to prepare its children for active citizenship and equip them with skills and understanding they will require during their productive work years. Education should not be viewed as a time-bound and place-bound process. It is, in fact, a case of life-long learning, a process which starts in the pre-school life of the child, is developed through formal schooling, and continued in one form or another in adult life. This entails a variety of methods and sources of learning. Education, formal and non-formal, contributes to individuals gaining the requisite understandings and

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skills, and also the will and the spirit to meet the challenges likely to emerge in their life, particularly from new situations.

This paper will review the various learning processes which have dominated the educational scene and provide some insights into them, particularly in the context of child-centred education.

Childhood education, in most countries of the world has a long history of commitment to the kind of teaching that focusses on active and integrative learning. Education, cultural transmission, the teaching and learning of knowledge, skills and attitudes, is the activity that is noticed most. Schools are set up to ensure basic learning and for achieving cognitive and affective educational purposes. Formal teaching is the chartered activity of the school. The imparting of educational instruction has veered around two paradigms, namely, knowledge-centred education and child-centred or learning-centred education. We shall discuss them in some detail.

II

The knowledge-centred education paradigm is based on the premise that the norms, standards, content, methods, and goals of education are determined by educators and not

learners. Everybody was expected to go through the same lessons, with choice restricted to when and how fast the work is to be done. At times, it was felt that this external control could be repressive and even thwart self-expression and creativity. Paulo Freire charged that in such situations, learning is hindered by "narration sickness" wherein the instructor monopolizes the talk time. The educator's task is perceived as being one of filling the students with others' facts and beliefs. These 'deposits' disbursed by the teacher are to be taken by the learners. Under this dispensation the deposits are to be accounted for and brought forth on signal. Freire labelled this "banking education". Most of the learning is structured in rote fashion and teachers generally follow the detailed procedures to complete their lessons and assignments. Herding children through the same assignments at the same time and through each subject in turn holds some children back, and hurries others. Boredom and frustration set in. Little attention is paid to the products of student effort. Freire deplored the static, other-controlled, normative educational system and labelled it *is*, 'necrophilic! He saw it as restricting experimentation and creativity by replacing first hand experience with others' beliefs and norms. The result, he claimed, is schooling that domesticates and emasculates individuals and renders

them more susceptible to indoctrination and external control. From his standpoint it deprives learners of achieving conscientization. The knowledge-centred paradigm visualizes for the process of education the role of transmission of culture of a society. Cultural transmission includes both the transmission of tradition from one generation to the next and the transmission of new knowledge or cultural patterns. Education can be viewed as the transmission of the values and accumulated knowledge of a society. Education is designed to guide a child in learning a culture, moulding his behaviour in the ways of adulthood, and guiding him toward his eventual role in society. In most primitive societies, there is often little formal learning. As societies grow more complex, however, the quantity of knowledge to be passed on from one generation to the next becomes more than any one person can know; and hence there must evolve more selective and effective means of cultural transmission. It should also be obvious that there is a dynamic process of cultural systems in transmission which led Robert Redfield to speak of education as "the process of cultural transmission and renewal" (1963:13). People are both products of and creators of, culture.

One of the problems with the knowledge-centred paradigm was its unidimensional conceptualisation of cognitive development. Cognitive development is stressed often at the expense of other dimensions of growth. This emphasis derives, on the one hand, from an implicit assumption on the efficacy of education in promoting equality; and, on the other hand, of "the availability of what have been thought to be appropriate methods of measuring intelligence and achievement as educational outputs" (Blackstone 1973). Cognitive development up to the child's full potential is an important goal. Yet, cognitive development is but one aspect of total human development; it cannot be treated in isolation from this totality. There needs to be a recognition of the interdependence of the different aspects of the total individual and his development in a wholistic fashion.

Another problem of this conceptualisation is abstracting the child from his or her environment and treating his or her in isolation. The need is for a multi-dimensional conceptualisation of child's development for dealing with the child within his or her immediate socio-cultural environment and for considering the baselines of performance. One of the main functions of the schools is to stimulate students to become cultivated human beings, i.e., subjects who achieve a Socratic "know thyself", which is historically rooted both in their individuality and in their participation in social processes.

III

The second paradigm which is called the child-centred or learner-centred education¹ represents the practice of building education round the needs and interests of the child himself or herself, based on a study of his natural development. Scholars such as Rousseau; Froebel, Montessori, Pestalozzi, Dewey and Paulo Freire laid the foundations of this approach. Instruction is organised around individual needs and interests of the child, rather than around predetermined units of subject matter. Proponents of this paradigm view the traditional content-oriented curricula as narrow, boring, and irrelevant, and believe that the immediate concerns expressed by the child are central to successful learning and provide a valid basis for curriculum. They reject the notion that the study of the structure and content of a discipline is the best training for the mind, and see organised knowledge simply as a resource upon which to draw to solve problems and obtain skills. They are particularly aware of the need to respond to individual differences and to adapt instruction to the developmental stage of the learner; and believe that the child-centred education performs these tasks most successfully. Advocates of child-centred education also view the school as needing to attend to all aspects of the individual physical, emotional, social, and mental. They wish to

¹ Pauls Freire calls it "problem-posing education" paradigm.

produce an independent, creative, self-directed learner, and with this end in view organize instruction around the interests of students compatible with these goals (Saylor and Alexander 1974). Proponents of the child-centred or learner-centred education paradigm have typically argued that the school should suit the needs of the child, and not the child to the school.

One of the forerunners, called the father of progressive education by John Dewey, was the American educationist, Francis W. Parker. In his view, what mattered in a school was not the learning of subject matter, neatly and logically arranged, but the child's own development. He stressed "quality education", by which he meant such things as activity, creative self-expression, excursions, understanding the individual, and the development of personality. The progressive believes, with Rousseau, that the heart of education is the child, that he or she has a nature all his or her own that demands respect and understanding, that interest is the motive of successful learning and without it learning is sterile, that the school should be a 'place of good living' providing for the interests and activities that the child's nature requires, and finally, that the school should be a living society helping the child to participate effectively within a social group.

Dewey stated that the learner-oriented processes ensured the students' analysis of their experiences and encouraged learners to become more self-directed and self-responsible. Instead of processing facts from books and teacher-talk, learning emerges from the learners' processing of their direct experiences. He stressed that society should be interpreted to the child through daily living in the classroom, which acts as a miniature society. Education leads to no final end; it is something continuous, "a reconstruction of accumulated experience"; which must be directed toward social efficiency. Education is life^{and}/not merely a preparation for it.

Pestalozzi believed that education should be organic; meaning that intellectual, moral and physical education (or in his words; development of "head, heart, and body") should be integrated and education should draw upon the faculties of "self-power" inherent in the human beings.

Alertness to the child's growth in purposefulness is required; of course of those who build upon the interest base of learning. The process of maturation requires and depends upon the interaction between the learner and his surroundings. And knowledge is product of this interaction. The learner interests with what is around him and finds

that satisfaction comes as he succeeds in discovering out of his experimentation. A child impeded in inter-action with his surroundings; either physical or social, has a difficult time learning. Freedom to interact is indeed a necessity (Hemmings 1973; esp. ch. 13).

To remain dynamic society requires the outpourings of countless creative persons. Creative children find themselves put down by the forces of conventionalization. The demands and expectations of the work-a-day world stifle creative urges and impulses. Children must grow up at ease with innovation if they are to contribute to it. "Creative thought" is called for because it can "cause things to look different from what they seemed before and may indeed work for their construction" (Robinson 1950: 49). Creative thinking is understood to be essential in every aspect of modern society. The educational problem of society is to maintain openness in the face of all forces that work for standardisation in outlook and ideas. Creative activities are conventionally accepted as important in the lives of children. But their true function is not always understood. Our goal; as expressed by Jonas Salk; should be to help children acquire "a constructive method of thinking which keeps the mind open to the discovery of new aspects of reality in a dynamic approximation of truth" rather than

ending up " with ideas that resist change " (Salk 1972:94). Creative activity needs to be a part of children's experiences in all subject fields.

The creative element plays a large part in differentiating one human being from another. Heredity and the miscellaneous events and accidents of each life provide a foundation. But everyone develops uniqueness through a combination of consciousness and responsiveness that belongs to him alone. For individuality to flourish there must be freedom ^{from} over-concern with conformity. Independence is the road to individuality. Even when he is alone, man "thinks about questions and issues that have been born in intercourse", as Dewey points out. Independence "does not signify separateness; it is something displayed in relation to others" (Dewey 1960: 79-80). Creative children chart their world as they move through it. Assuming such responsibility then, is the key not only to individual but to the maintenance of democratic institutions. Continuity of learning is necessarily internal; and when it is wisely governed, such activity promotes the only kind of integration of learning that can be counted on. Knowledge and sense of need come together in due time with their "essential relationship... developed by the learner himself (Nutting 1973: 41).

Like Dewey, Freire also urged that educational content be drawn from the everyday life experience of the learners. He starts from the premise that all people have certain capacities, but the development of these capacities is blocked by the existence of oppression. He envisioned the possibility of socially disadvantaged groups and individuals improving their self-image and their socio-economic and political development. Freire (1978:86) stated, "Nobody can educate anyone else; just as nobody can educate themselves; people educate each other, in communion and the world is the mediator". It is through communication in its all-embracing sense of a two-way traffic of information, ideas, and feed-back; between peers on the one hand, and with the instructor on the other, that liberating education occurs. It capitalizes on interpersonal interaction in order to enhance skills in communication and critical thinking. Freire contended that such communication can bring about humanizing, lasting, and utilizable learning. Such communication leads to conscientization. Conscientization and knowledge can come only through dialogue and liberation. Conscientization, as Freire delineates it, helps people to better understand themselves and their potential and to initiate action against society's shortcomings and ills. The conscientization process impels learners to examine and inquire about

themselves; their situation. and their environment. They thereby begin to comprehend their responsibilities for initiating moves not only in their own; but in other's interests. Freire relied heavily upon instructional strategies that lead on to liberation and praxis, namely, ".... the action and reflection of men upon their world in order to transform it" (1976: 66).

IV

These different kinds of learning vary in their depth and complexity; in the time, effort and maturity required to attain them; in their degree of generality, specificity and transferability to new situations; in their inherent value and durability. Yet all of them, if relevant to the circumstances, can enhance human capabilities and the behaviour of both individuals and communities.

The process of life-long learning for the child will require an intelligent; devoted and sustained effort by many people and organisations over a long period. The efforts should be directed towards building a comprehensive and coherent learning system that will provide the learners with convenient educational options relevant to their evolving needs and interests. Such a learning system must provide individuals with a flexible and manifold learning options. Such an endeavour will call for an admixture of formal as well as non formal systems of education.

REFERENCES

- Dewey, John 1960 The Theory of Moral Life. New York: Holt, Rinehart & Winston.
- Freire, Paulo 1978 Pedagogy in Process : The Letters to Guinea-Bissau. New York : Seabury.
- Hemmings, Ray 1973 Children's Freedom : A.S.Neill and the Evolution of the Summerhill Idea New York: Schocken. esp.Ch. 13, "The Necessity of Freedom".
- Murray, L.Wax and Rasalie, H.Wax, 1971 'Great Tradition; Little Tradition; and Formal Tradition in Murray L.Wax, Stanley Diamond and Fred O. Gearing (eds.), Anthropological Perspectives on Education. New York: Basic Books.
- Nutting, William C 1973 Designing Classroom Spontaneity. Englewood Cliffs, N.J.Prentice-Hall.
- Reimer, Everett 1971 School is Dead : Alternatives in Education. Garden City, New York : Doubleday.
- Reimer, Everett 1971 School is Dead : Alternatives in Education. Garden City, New York : Doubleday.
- Redfield, Robert 1963 The Social Uses of Social Science Chicago: University of Chicago Press
- Robinson, James Harvey 1950 The Mind in the Making. New York: Harper & Row
- Salk, Jonas 1972 Man Unfolding. New York : Harper & Row
- Saylor, J.G. and Alexander, V.M. 1974 Planning Curriculum for Schools. New York : Holt, Rinehart and Winston.

TITLE OF PAPER : TOWARDS EDUCATION FOR NURTURING CREATIVE
POTENTIAL AMONG CHILDREN

Sushma Gulati*

An anecdote, describing an encounter of a child in an elementary school with his teacher may make a good beginning for this paper. Children in a class had been told to draw a human head as an exercise during a drawing lesson and had been quietly at work for sometime when one child working hard for several minutes came to the teacher. The main purpose of the exercise had been to keep the class quiet for a while, so that teacher could catch up on some paper work and so she was not at all pleased to be disturbed by the particular student concerned. With some impatience, teacher asked the child what he wanted and why he was not at his desk working as industriously as the other members of the class.

The child wanted to consult the teacher on some problem and the problem was revealed in the question he asked. 'Please Miss, do we have to draw the inside or the outside of the head ? He showed his partly completed drawing to the teacher--it consisted of a sketch of the inside of a human head, as the child thought it might look if the observer got inside somehow and looked around him. The teacher scolded the child, telling him to stop

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being such a fool and to get to work on a proper drawing the same as all the other 'more sensible' children were doing. Everyone else had known what she meant, but he had to be a fool and try to draw the inside of a head. Teacher was in fact, tired of his continual stupid suggestions and ridiculous questions.

For those who have actually done some teaching, it is very easy to sympathise with the teacher concerned especially as she had large class. However, consider the effect on the child. He had been labelled a nuisance and a trouble-maker. Eventually, if such experiences are repeated, he may learn to do the "sensible thing" which everyone else does and to stop being 'cheeky' to his teachers.

If, however, one thinks about this question in the incident just described, one wonders as to what is wrong with wondering how a person's head looks like from the inside? Why should the child not draw this unusual view of a head? The real reason for the teacher's anger was, of course, that child had threatened to produce some work which was not uniform with that of the rest of the class. If the child is encouraged to make more and more of divergent productions, such a child may begin to make the teacher's job more and more demanding making difficult to run the class in a routine way.

The literature admonishes that children are not encouraged often not permitted-- to ask unusual questions, to explore new ways of thinking, to try novel approaches to problem solving, to play with ideas and to think and use divergent ways of dealing with traditional topics. While children are naturally creative and they are usually engaged in the processes we associate with creativity. They are constantly probing, discovering, imagining, fantasizing, asking questions, guessing, wondering. It is true that there are some children with vigorous imaginations who can maintain their creativity in spite of rejection and ridicule. However, many fail to manifest their creative potential at an optimum level. Many a time children's creativity is not discovered and it tends to atrophy. It is thus often said that creativity needs to be identified, energized and guided almost from birth. Some cross-cultural and longitudinal studies by Torrance (1967) on seven cultures including India suggest that there are fluctuations and discontinuities in the development of creativity among school children usually accompanied by behavioural problems, learning difficulties and other personality disturbances. It is a matter of common observation also that children come to school with spontaneity, insatiable curiosity, free expression and imagination. These diminish as they proceed through school. This phenomenon of slump in creative thinking, though observed differently in different cultures, has primarily been ascribed to environmental forces--i.e. to greater pressures to conformity and standardization. Many studies in this direction suggest that this is

societal and not biological phenomenon and that slump can be offset by providing proper environment which will facilitate the expression and development of creativity.

An obvious fact which emerges out of these findings is that development of creativity cannot be left to chance and creativity is likely to flourish in an environment which values creative thinking and behaviour. 'What is honoured in a country will be cultivated there' said Plato. Torrance (1965) has shown that in no less than five countries which he investigated including U.S.A., Germany, India, Greece and Phillippines, the cultures tended almost unanimously to disapprove strongly the qualities like asking unusual questions, guessing, being independent, being willing to take risks, having the courage of one's convictions etc. Paradoxically, despite some lip service to the notion that creativity should be fostered, the qualities of **creative children** are precisely the ones which are usually frowned upon in most cultures. Thus if we want to develop creative thinking in children, it is reasonably certain that we must learn to value creative thinking and behaviour. This is necessary because children develop those characteristics which their teachers, parents and significant others encourage or discourage and studies show that what parents, teachers and society encourage or discourage seem to be more important than hereditability. There is thus a need for creative-genic environment, as says Arieti (1976), that is, an environment that stimulates creative thinking and behaviour.

Theoretically speaking, development of creativity in children has long been a prime purpose of education. Perhaps, what is new is the growing realization that creative potential is not limited to gifted few and determined at birth. All children are creative to some degree and that creativity is manifested in a wide spectrum of human endeavours not just in science, the arts or in the obvious activities. The recent National Policy of Education (1986) has given special attention to the need to improve the quality of education by developing in children such abilities and skills as spontaneity, curiosity, Independence in thinking, scientific temper, courage to question, originality, imagination, in short, creative thinking abilities and skills. With the changing times as the new dimensions are opening up, it is being felt that there are greater opportunities for creativity in every sphere of life and that it is necessary to give a fair chance of developing creative abilities among children right from the early stages of schooling. There is now a growing concern among educators that we must equip our children with such thinking skills and abilities to enable them to meet future problems of life creatively and inventively rather than solve problems with a single right answer most often found in the examinations. School is, in fact, the place where perhaps an organised effort can be made to nurture and develop in children the basic foundations, the abilities, skills and motivations necessary for creative achievements in life.

Research and experimentation supports the concept that deliberate attempts can be made to develop creative potentialities among children by programming the educational climate in schools. If we look into the educational process a bit more carefully, however, we find that our system of education does not easily lend itself to the development of creativity. It is rigid and tradition bound. The load of academic studies, the number of textbooks, the home work and the preparation for tests and examinations are a real negation of what education should be. It largely encourages acquisition of knowledge, memory, accuracy, neatness and cautiousness but rarely calls upon children to think, what to say of thinking creatively and inventively. Keeping in view the type of abilities we need to develop in the child, knowledge per se loses much of its importance. Knowledge is necessary because to exercise creativity, individual must have the base on which to build. Instead of becoming an end, however, it should now serve only as a means for the development of such abilities which would help the child to make a large variety of adjustments in the fast-changing world.

There is, in fact, a need for a general re-appraisal of all aspects of the educational process- the curriculum, teaching and learning strategies, instructional materials, examinations, classroom and school organisation to facilitate the development of creativity in schools. The problem encompasses the entire educational system.

There can be essentially two approaches according to Passow (1976), to introducing creativity into formal education. One is to teach it as a new subject or skill and the other is to modify the curriculum, to teach creativity in its own right or draw upon the creative potential of all subject areas which are taught. DeMille (1963) put it this way :

'The introduction of creativity in curricula can be looked at from two different standpoints. Creativity can be thought of as a new sort of subject matter or skill that is imparted by means of language, number graphic, musical activities, dramatics etc. or the existing curriculum can be thought of as the essential core and an effort can be made to teach it in a better way by bringing out creativity implicit in it. The curriculum can be vehicle for creativity or creativity can enhance the curriculum.

Kneller (1965) arguing for modifying the present curriculum suggests that creativity is not an isolated process but a component of many activities.

"One can, it is true create per se in the sense of producing a symphony or a scientific theory but from the point of view of universal system of education, it is important to recognize that if a person is to make full use of his talents, he should learn to think creatively in a range of situations and on a variety of subjects. The mind, in other words, should be trained to think creatively at the same time that it is trained to think logically (p.78).

The National Curriculum of Elementary and Secondary Education- a Framework, (1988) prepared by NCERT in active collaboration with the State agencies has given due attention to the need to develop in each child originality and creative talents. It says that education for creative expression has

attention that not received adequate/so far and/a well organized Art Education programme can be an integral part of school education in this context. Whether some content areas have greater possibilities for contributing to the nurturance of creative abilities- this is an issue which confronts the curriculum planners. However, the author agrees with Parke (1985) that nurturance of creativity does not belong to one "creativity period" but can be developed through entwining opportunities for creative expression throughout the curriculum.

Aside from the curriculum content, there are certain methods of teaching which can be used in usual classroom settings to encourage creative potential among children. Even if curriculum is broad based and provide all opportunities for creative learning yet creativity, in fact, may not emerge because the teaching methodology is not creative. The methodology, of course, will vary in accordance with the age level of pupils and different subject areas. By making use of certain teaching-learning strategies, teacher can teach almost any subject in ways that call for creative thinking rather than rote memory. These techniques do not teach a student to be creative, they give the students the chance to develop the creative potential they already have. Some of these techniques are : Creative problem solving, Questioning, Role-Playing, Brain-storming, Creative arts, Creative dramatics, Story-telling, Creative reading and writing, Discovery and inquiry approach. Some techniques are more relevant for some subject areas but few

can infuse creative abilities throughout the curriculum. Questioning is one technique teachers always have at their disposal. As Gallagher puts it "it was the teachers questions that determined the focus of the classroom operation and the style of question asking determined the kind of thought operations that the student would be asked to perform". Divergent, provocative and open-ended questioning may lead to creative thinking. Most of the questions asked in the classroom are usually the single answer variety or the retention questions. Teacher seldom ask questions that cause children to think in new ways. Rather than asking convergent questions with only one right answer, questions can be interspersed that can be answered in many ways. This does not require funds but different approach, attitude and skills.

There are good practical reasons for adopting creative approach in teaching. A creative teaching-learning process helps children to think, inquire, explore, guess, play around with possibilities and test one's ideas against the facts which are essential ingredients of creativity. It provides a friendly, informal, non-threatening, accepting and motivating atmosphere for learning. Torrance (1977), in this context, stated that children fundamentally prefer to learn in creative ways-by exploring, manipulating, questioning etc. and research suggests that many things though not all can be learned more effectively and economically in creative ways. Creative learning is more economical than rote learning and some children who learn

poorly by conventional methods are effective learners when their teachers utilize their creative thinking abilities. As Cropley (1970) says, creative teaching-learning is in itself satisfactory to the student's curiosity and ingenuity. Studies have also shown that creative teaching usually results in inward creative growth, liking for school, involvement and participation in creative activities (Smith, 1966, William, 1967, 1970, Torrance, 1977). Since the creative needs and abilities have been regarded universal for all children, creative teaching is not the exclusive way of learning for any type of children.

Besides some specific instructional techniques, there are a variety of approaches, skills, strategies, materials, relationships with pupils etc. that might be used. Through the natural learning and problem solving activities, there can be abundant opportunities for discovering and nurturing creative potentialities. For example, asking students to give as many different ideas as possible for a given problem, asking them to complete the story in their own ways, telling them to think of unusual titles of a particular story, making them guess causes and consequences of a particular situation, asking alternative uses of a particular object, telling them to sense deficiencies in a particular object and suggest different and unusual ways to improve it, encouraging them to ask unusual questions and so on. Such open-ended exercises call into play originality, imagination, flexibility in thinking, ability to guess and hypothesise and curiosity etc.

A number of writers have called attention to the healing value of creative activities. Milt (1959), for example, maintains that there is therapeutic value in permitting the child to tell his story in his own way. She says, "it may be a chimney to carry away the smoke, an escape value for the pent up steam". Activities like drama, dance, music, writing, quiz programmes, debates, science fairs, exhibitions etc. usually organized in schools, therefore, should be so planned that these provide scope for the expression of creativity and innovations.

A teacher interested in developing creative abilities needs to know that creativity can be developed in the classroom in an atmosphere of psychological safety and freedom. There are certain blocks which hinder the development of creativity like too much emphasis on being right, conformity pressures, too much impatience and consciousness of time wasting, everything children do should be useful, successful and perfect, rejection and ridicule, inducing fear of failure, over protection, need to conform to sex roles, inconsistency, lack of tolerance of dissent etc. The fear of being wrong may be students' greatest deterrent to attempting originality and new ideas (De Bono, 1969). Teacher must respect each child's uniqueness and the child must feel free to exhibit his uniqueness. Towards this end, Torrance (1977) offers guidelines for teachers, some of which are :

- Be respectful of unusual questions.
- Be respectful of imaginative, unusual ideas.
- Show your pupils that their ideas have value.

- Evoke originality in thinking, make it clear that such thinking is expected and will be rewarded.
- Occasionally, have pupils do something without threat of evaluation.
- Provide opportunities for self-initiated learning & give credit for it.
- Provide materials which develop imagination
- Permit time for thinking & day dreaming.
- Encourage children to record their ideas.
- Ask provocative questions.
- Encourage children to play with words.
- Be cautious about always editing children's writings.
- Accept the child's natural tendency to take a different look on things.
- Prize rather than punish individuality.
- Love them and let them know it.

The implication which seems clear from the foregoing is that teacher whether he be a parent or professional is the most effective and important resource towards promoting the cause of creativity development in children. Teacher's approach must, however, be more than a bag of tricks. By combining opportunity and skill development in the curricular approach and learning strategies, teacher can enhance children's creativity even with ⁱⁿ the constraints of the present system of education. The literature is replete with articles showing that teacher's attitudes, skills, behaviour, classroom climate and teaching-learning strategies contribute to the facilitation of creative thinking in children. This is possible only if teacher understands what a creative child is like, what kind of environment stimulates or stifles creativity, what general and specific strategies should be used to nurture creativity in children. By and large, teachers in our country are not sensitive to the need for identifying and developing creativity in children.

They are not sufficiently aware of the nature, process and development of creativity during teaching and learning, how to handle creative children and channelize their creative potential and so on. This seems to be due to the limited exposure in their usual teacher preparation programmes or lesser opportunities to participate in the professional courses to improve their skills and knowledge from time to time. Increasing emphasis needs to be placed on upgrading teacher's knowledge to bring them abreast of new findings on classroom practices to develop creative thinking in children. The first document on Challenge of Education-- a Policy Perspective (1985) also express its concern on this point :

" It has been noticed that the vast majority of students are not exposed to challenge which would develop their potential for creativity and innovation because the whole system of education is characterised by classwork and examinations which emphasise rote learning and repetitive exercises. Undoubtedly, this will require the overhaul of pedagogic methodology as well as the curricula and textual materials. These, however, will not be enough. Something will have to be done to change the orientation, work ethic, knowledge and skills of teachers who will have to function much more creatively in a learning rather than a teaching environment, in which they will have to struggle continuously with new ideas as well as new technologies" (p.11)

Implications of creativity research for teacher education programmes are of considerable value, but

still creativity as a key area of training is yet to find a place in the regular training programmes in our country. Our teacher education needs drastic changes in terms of curriculum, approach and strategies. Merely including the topic of creativity in the curriculum will not be enough. Today, our practice teaching is almost traditional and stereotyped and criteria of supervision are fixed and rigid. There is little scope for pupil teachers to use their ingenuity, originality and imagination. The main emphasis remains on helping them deliver a few prescribed lessons irrespective of the fact whether or not they have acquired requisite insight and skills in teaching. Teacher trainees should be encouraged to develop a few lesson plans inducting creative approaches in their practice teaching. Divergent approach emphasizing originality, flexibility, independence should be duly acknowledged both at the stage of preparation and evaluation. For this, teacher educators should themselves follow such teaching practices and skills. This is imperative as Butler (1975) claims 'teachers generally perpetuate the same methods of teaching as they experience themselves'. This vicious circle needs to be broken somewhere. As one of the thrusts of the National Policy of Education (1986) is improving the quality of teacher education, it is hoped that the National Council for Teacher Education (NCTE) succeeds to evolve a system of education which prepares committed, creative and professionally competent teachers.

In India, some short-term training programmes have been developed to help teachers understand, identify and nurture creative potential among school children. A modest attempt has been made by the Department of Educational Psychology, Counselling and Guidance of NCERT in this direction. The Department is offering a ten-day training to the teacher educators of elementary teacher training institutions covering different regions of the country in a phased manner since 1985 (Gulati, 1985-88). They are expected to extend this training to the teachers at the grassroot level through pre-service and in-service training programmes. More than 200 teacher educators have been imparted training. A systematic follow-up of these programmes is being taken up separately.

The theme of such programme is 'awareness'. However, emphasis is also placed on skills development through practical activities. Participants are taken on to field visits to different institutions/schools for exposure to various creative activities which teachers can incorporate in their day to day teaching and interaction with children. They are also given training in preparing lesson plans for creative teaching in different subject areas.

Since all the teacher educators of the country cannot possibly undergo the training, instructional materials in the form of a handbook are being developed on different aspects of creativity development in children suitable to the Indian

conditions. Future attempt in this direction would be to orient the counsellors and guidance workers in schools, wherever trained counsellors are available. Counsellors are important functionaries in the school system and therefore, the orientation programme will help them understand creativity in children and guide and maintain their creative potential. An added advantage would be that they would be able to extend the knowledge to school teachers especially to the in-service teachers in their day to day interaction and working with them.

Accounts of various efforts to develop creativity among children in some schools and institutions in India are available. Bal Bhawan Society, India, Centre for Cultural Resources and Training, Delhi, Jnayan Prabhodhini, Pune, Eklaaya in Hoshangabad, Seta School in Silvapura, Bangalore, Priyambika School, Springdales and Sardar Patel Vidyalaya, Delhi deserve mention. These institutions/schools are actively involved in promoting creativity among children and/or developing programmes for developing creativity through teacher training. The need is, however, for close collaboration between different institutions and schools to complement and supplement each others' efforts.

To conclude, it may be stressed that the question of providing education for developing creativity among children relates to the re-assessment of our values and re-appraisal of the goals of education and ends of educational process. It is

usually felt that we must also change our examination system to the extent that flexibility of ideas, uniqueness, originality, fluency and divergent thinking are given due weightage. Even the school books and textual materials need to be so developed as to facilitate creative thinking in children. Indeed, requirements are too many and there are various cultural, structural and educational barriers to the development of creativity among children especially in India. Nevertheless, if we really want the child of today to think and behave creatively in life situations, there can be innumerable opportunities to nurture creative potentialities among children to considerable extent by all those who influence his development. Besides teachers, it is also essential to mobilize parents and community and motivate them to help children develop creative thinking abilities and skills. Without their efforts, schools will not have the necessary support.

It is true that every component of education and schooling affects the fostering of creativity but teacher's awareness, motivation, skills and attitudes are of paramount importance. Under the child centred approach to education as articulated by the National Policy of Education (1986), a significant reorientation to the very approach to education is already taking place. The entire gamut of processes of teaching and learning is being re-oriented in order to develop an interactive process of learning to stimulate curiosity, imagination and problem solving among children. The learner will no longer

be a passive receiver of knowledge. The teacher with a changed role of a facilitator of the learning process and organizer of learning situation is required to adopt new innovative approaches to teaching traditional disciplines. There are going to be tremendous possibilities for teacher to create conditions in the usual classroom settings to facilitate creative potential among children. Creativity oriented approach is at the very heart of the child-centred approach to education and, in fact, implicit in it. It can provide us the kind of education which will nurture creative potentialities among children- indeed among all children.

REFERENCES

- Arieti, S. Creativity : The magic synthesis, New York : Basic Books, 1976.
- Butler, A.N. Introducing and Implementing Innovation, Ideas, 1975, 28, 78-82. Reprinted in tradition and change in contemporary education. London, 1975, 78-82.
- Cropley, A.J. Creativity. Longman Group Ltd. London, 1970.
- De Bono, E. Information Processing and New Ideas-- Lateral and Vertical Thinking, Journal of Creative Behaviour, 1969, 3, 151-171.
- De Mille, R. The Creativity Room, Teachers College Record, 65 : 199-209, 1963.

- Government of India, Ministry of Human Resource and Development,
Challenge of Education - a policy perspective,
1985, p.11-12.
- Government of India: Ministry of Resource and Development,
National Policy of Education, 1986.
- Gulati, S. Report of the Training Courses on Identifying
and Encouraging Creative Potential in Elementary
Grade, DEPC&G, NCERT, 1985-88.
- Kneller, G.F. The Art and Science of Creativity, New York:
Holt, Rinehart and Winston, Inc. 1965.
- N.C.E.R.T., National Curriculum for Primary and Secondary
Education - a Framework, New Delhi, 1988.
- Parke, B.N. Methods of Developing Creativity, In Raymond
H. Swassing (Ed) Teaching Gifted Children and
Adolescents. Belland Howell Co. USA, 1985.
- Passow, A.N. Fostering Creativity in the Gifted Child in
Gibson, J. and Channells, P (Ed) Gifted Children:
Looking to their future. The Anchor Press Ltd.
London, 1976.
- Smith, J.A. Setting conditions for Creative Teaching in the
Elementary School, Boston, Allyn and Bacon, 1966.
- Torrance, E.P. Rewarding Creative Behaviour: Experiments in
classroom. Englewood Cliffs, NJ: Prentice
Hall, Inc. 1965.
- Torrance, E.P. Must Creative Development be Left to Chance, In
Gowan J.C.; Demos, G.D.; Torrance, E.P. (Ed)
Creativity: its Educational Implication,
John Wiley and Sons, Inc. New York, 1977.
- Torrance, E.P. Creativity in the classroom. Washington, D.C.
National Educational Association, 1977.
- Torrance, E.P. Creative Learning and Teaching New York: Dodd,
Myers, R.E. Mead and Company, 1970.

- Williams, F.E. The Search for the Creative Teacher. In Gowan, Demos and Torrance (Ed.) Creativity and its Educational Implications, John Wiley and Sons, USA, 1967.
- Williams, F.E. Classroom Ideas for Encouraging Thinking and Feeling. Buffalo, N.Y. D.O.K. Publisher, 1970.
- Wilt, M. Creativity in the Elementary School, New York: Appleton-- Century -- Crafts, 1959.

* 147 *

TITLE OF PAPER: CHILD CENTRED EDUCATION: IS IT FEASIBLE

T.N.Dhar*

Intent of the National Policy

Policy -

The National Policy on Education, 1986 (Ministry of Human Resource Development 1986, New Delhi) intends to provide child-centred primary education. It is one of those statements which it is very difficult to take seriously. For one thing, the Policy does not show how this intention is proposed to be attained. For another, it is not the first time that a statement of this kind or with similar intent has been made. In education, policy statement of this type have been made. There has never been an indication of what they involve in terms of resources investment and training of manpower. Without such an indication the proposal to provide child-centred education can, at best be regarded as wishful thinking, a pious hope which like so many other hopes, will remain un-fulfilled. The policy on child-centred education suffers from an added disadvantage of not being possible of implementation.

2. The Dictionary of Education (Derek Rowntree: Harper and Row, London 1981) characterises child-centred education a "rather woolly slogan", "its main point being made by the teacher who claims, 'I teach children, not subjects'".

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Child-Centred Education represents basically an approach which "implies care of the 'whole' child - his personality, needs, learning styles and not just for his or her academic prowess." (p.38). Educational psychologists have, for years, based the argument for child-centred programmes on the uniqueness of the individual. Although God created man (and woman) in His image, the images that He created are innumerable and rarely duplicated. Each individual is unique in more senses than one - the gene structure, the personality make-up, the potential for growth, the pattern of responses to situations and so on.

3. That all education must be client centred - taking into consideration specific individual needs in specific settings - has long been recognised. Without being focussed on individual needs and interests, education would be sterile, irrelevant and incapable of generating motivation essential for learning. Bereft of its context, education would be unproductive and, whatever is learnt, incapable of being purposefully utilised. The advocacy in the National Policy of focussing education on child needs and concerns during the first cycle of education seems, in this context, to be only a cliché, which has so often been repeated, with so little action.

Components

4. What does child-centred education involve according to the National Policy? The entire paragraph, where child-centred education has been defined indicates a lack of knowledge of how a child grows. Nor does it show an understanding of the purpose and process of education. The paragraph reads:

"A warm welcoming and encouraging approach in which all concerned share a solicitude for the needs of the child, is the best motivation for the child to attend school and learn. A child-centred and activity-based process of learning should be adopted at the primary stage. First generation learners should be allowed to set their own pace and be given supplementary remedial instruction. As the child grows the component of cognitive learning will be increased and skills organised through practice. The policy of non-detention at the primary stage will be retained, making evaluation as disaggregated as feasible. Corporal punishment will firmly excluded from the educational system and school timings, as well as, vacations adjusted to the convenience of children." (P.11).

5. What are, according to this formulation, the components of child-centred education? They seem to consist of:

- a warm welcoming and encouraging approach
- a solicitude for the needs of the child
- activity based process of learning
- first generation learners to set their own pace
and provided with supplementary remedial instruction

- increase in the cognitive component of learning as the child grows
- non-detention at the primary stage
- disaggregation of evaluation to the extent feasible
- abolition of corporal punishment
- adjustment of school timings and vacations to the convenience of children

Fallacy of the Approach

6. The approach displays loose thinking. It is not, for instance, the solicitude which is important, but a specific programme which caters to the developmental needs of the child - physical and emotional. While practical activity is essential it is necessary to recognise that, to be meaningful from the learner's point of view - which facilitates learning and helps to deal with other situations - it must be based on and preceded by a cognitive framework. An understanding of the process and nature of the activity and the various relationships is important to make the learnt skills part of an individual's repertoire of meaningful experiences. Remedial instruction is not the only thing that first generation learners require. Their self-concept and aspiration and motivation levels are seriously eroded by their social and economic situation.

These are more important for learning than mere remedial instruction, which as experience shows is likely to be only cognitive in character. In the case of disadvantaged far more work needs to be done to generate in them the desire to achieve and a faith in their ability to achieve. Enabling these children to perform at the level that they are potentially capable of, should be the objective rather than allowing them to "set their own pace". The latter will only maintain their disadvantaged status. Compensatory education programmes, as U.S. experience has shown, is not good enough.

7. It does not require wisdom to realise that skill-learning requires practice. It is, however, not clearly recognised that skill-learning must have a conceptual base to be effective and transferable. Disaggregation of evaluation is a term which one does not come across in educational literature. Again, it is not the convenience of children which requires adjustment of school timings and of vacations, but more the needs of the family for child labour during harvesting and sowing seasons. Given, however, the conditions prevailing in our primary schools, children would, no doubt, welcome school timings and vacations adjusted in such a way as not to make it compulsory for them to attend schools!

8. One would have assumed that concern for child-centredness would go beyond mere warm welcoming and encouraging approach and a solicitude for a child's needs. They are no doubt important, although hard to come by in the existing educational setting. What is needed is a specific well-articulated plan of action which takes into consideration the needs of children at specific stages of their development and willingness to implement it. The Programme of Action (Ministry of Human Resource Development, New Delhi) merely states: "The child-centred approach, commended in NPE, attempts to build the academic programme and school activities around the child" (P.9). The Programme fails to identify the needs of the child and indicate a specific educational programme that will be implemented in relation to them. The "drive for a substantial improvement of schools and provision for support services" and organization of non-formal education for children who cannot be in school as they have to "supplement family income or otherwise assist the family" are regarded in the Policy, as important components of the child-centred approach.

9. What does a child need for his education even when the latter is narrowly defined? Broadly speaking, one could think of the following:

- adequate nutrition and health care, which prevents **susceptibility** to disease and morbidity, myopia, hearing and speech disabilities, decaying teeth, listlessness and lack of attention.
- an environment which stimulates cognitive growth and facilitates concept formation and acquisition of language skills
- a climate for healthy emotional development capable of creating confidence in self, appropriate aspiration level and motivation to achieve
- skills which promote self-learning

10. It is true that these are not the sole concern of education. Social, economic and political policy and programme interventions are necessary to redress the balance in favour of the child - particularly the one who comes from the disadvantaged segment of society. It is necessary, however, to understand constraints and honestly acknowledge that certain things cannot be done inspite of good intentions. The catering to children's needs goes beyond "the reform of curriculum" and provision of co-curricular activities which the Programme of Action feels will make "education a joyful, inventive and satisfying learning activity rather than a system of rote and cheerless, authoritarian instruction". (.13). It is surprising that, without even

understanding what child-centred education really connotes and what its implications are, the Programme of Action should state: "By making elementary education child centred, we would be introducing a long-awaited reform in the education system". The statement tends to create the impression of an important and breath-taking discovery having been made by educational decision makers in the twentieth century!

11. Non-formal education can never be a solution to the education of children of the poor. It cannot be regarded as an alternative to child-centred education, nor even a form of it. At best, it is an escapist strategy and a compromise with the situation that exists and the conditions which obtain for the poor and the disinherited and which society is unable and unwilling to redress. Non-formal education does not meet the developmental needs of children. It does not even meet adequately their educational needs. It is being suggested for a segment of the population which needs institutional caring the most. Despite the desire to equate the outcomes of learning by prescribing, for instance, minimum levels of learning, non-formal education will not reduce the disadvantages - educational and other - from which the disinherited of the earth suffer. The prescription should not be either or none. The disadvantaged

need greater care and consideration. Their social and economic disadvantages should not be used against them - much less against the child, who does not exercise an option of being born in a disadvantaged family. Since they are poor and their children have to "work" - the value of which does not enter into calculations of Gross Domestic Product - they should not be exposed to education which does not allow them to compete on equal terms. A more logical would be to make non-formal education compulsory for children of the affluent and release resources for institutional education of the poor! They have access to other sources of learning, more potent than the primary school.

Pre-requisites

12. Because of being unique, the uniqueness of the child has to be studied. Individuals differ and differ considerably. The National Policy on Education and the Programme of Action do not show any awareness or understanding of individual differences and how they will be provided for through educational programming. The laying down of a minimum level of learning or the prescribing of a core curriculum (which is being interpreted differently depending on one's convenience) do not take care of individual needs of

individual children. The "minimum" is likely to be equivalent to "the least", for some, while for others level of the minimum would be pretty high. These levels will vary, not because they have been consciously and deliberately fixed, but because some have been born into a situation over which they have no control. Acceptance, even without protest of what exists and a compromise with injustice of the situation, is not what one expects from a Programme of Action.

13. A worthwhile and relevant educational programme needs to be designed in relation to the developmental needs of an Indian child (if there is one) and the socialization processes that prevail. These determine, to a large extent, the competencies expected of an individual in a community setting. The National Council of Educational Research and Training has, no doubt, undertaken studies of the cognitive development of Indian children. Whether the findings have influenced curriculum planning and design of learning strategies, is doubtful. Generally, the models adopted for curriculum development are those of the English speaking world outside India. These models remain in fashion for a certain duration and then die out and are substituted by other models. For many years Bloom and Bruner reigned supreme; of pedagogists. In any case, none is adopted for any serious exercise at reformulation of curriculum.

14. Is it foolhardy to assume that the Indian child is, in many ways, different from his or her counterpart elsewhere? Considering the different and distinct socialising processes in the Indian setting, one would expect developmental patterns to be different and consequently developmental needs of the Indian children distinct. Of course, there is a basic universality in individual needs. All children need food to survive and love to grow emotionally. The recognition and expression of needs differ. And, education should be concerned with the processes of expression and recognition. Adolescence, for instance, in an Indian setting, particularly in rural communities, is not the kind of traumatic experience about which one reads in American books on developmental psychology. An Indian girl at 13-14 does not suffer emotional breakdowns, if she is not dated. The Indian girl of 11-12 years assumes roles which require considerable maturity, understanding and norms of behaviour associated in western societies with adults. Are these and similar considerations important for designing a programme of child-centred education?

15. The other area of study would be what children bring to school viz. the entry behaviour of school entrants. In spite of their informal setting, the family and the neighbourhood "educate" children in formal operations so characteristic

of a school. The first grade child "knows" counting even before he/she enters the precincts of a school. He is aware of the difference in the quality of relationships. An uncle in the community is different from father's brother. The child's interactions are based on an "understanding" of the subtle differences that exist. An Indian child, in a poor household, also has skills which are for the family economically significant. Children have certain cognitive competencies. They "know" words although they might not know the symbols that represent them. They can count, weigh and measure, although in a medium different from what school uses. To maximise the use of scarce resources educational activity should begin from what is already known.

16. A study of the behaviour of children when they enter school could provide data on the "inadequacy" of the child's competencies which ensure school success. All children are not "ready" for schooling. For most, entry into a primary school is a transition from the informal atmosphere of the home to a formal regimen of the school. For quite a few this transition can be a traumatic experience, given the condition of primary schools and the attitude of teachers. Adjustments have to be made - for instance to the routine which governs school operations - and to the somewhat

"erratic and unpredictable" behaviour of the teacher. In designing an educational programme, teachers and other educational workers seem to adhere strictly to the worn out maxim of from the unknown to the known. Everything about the child is unknown and he/she has to know what he already knows! It is the clean slate approach which teacher training institutions try so hard to disparage at least in theory!

17. Schooling in some ways represents a formalised process of socialisation. In many respects, it is a structured interactional process. What is learnt informally is organised coherently, reinforced and supplemented by what schools assume will be required by the child in his future roles. Take for instance, communication through language. The child already has an extensive vocabulary and has informally learnt the structures needed for meaningful communication. In most cases, where the facility for pre-school education is either not available or not utilised, the child may not have the skill to represent in symbols what he already can speak or what he has already seen in posters on the walls or sign boards in streets. The school adds to his skills of communication by teaching him how various sounds and their combinations can be represented in symbols and read and written. While he might not know weights and

measures, he knows the difference between one fistful and one potful of rice. Schooling promotes generalised competencies necessary for understanding the similarities and dissimilarities of settings and ability to apply knowledge to a set of new situations. The limitations placed by concrete operations are thus transcended and the transfer of learning takes place.

18. Schools also help a child - or should help - develop an identity and relate his/her personal identity to a wider set of identities - family, neighbourhood, village, state, country. Personal identity has a time dimension. An individual's present identity, as that of the group, has evolved and is rooted in the past. In a substantial way, one is what one is due to the culture that he or she has inherited. While an individual has an identity which is distinct and unique, he is also part of the identity of the group to which he belongs. In a pluralistic situation like ours, it is essential that an individual understands his place and also the variety of roles which he/she will be called upon to play in different situations. Group identities exist and cannot be brushed aside. Their significance needs to be accepted and not regarded as being irrational. In the present day social and political context, group identities are no doubt exploited, often to subserve vested interests. The reasons include;

- the competition for limited benefits that economic development has made available
- the exploitation for political purposes of group and sectional loyalties
- the sense of power that an individual experiences by being part of a group

The significance of caste and clan alignments for political purposes (for example elections) is indicative of the sectional identities that are forged for certain purposes. They are there and will continue to be there. While on public platforms they may be disparaged in political machinations they are promoted and taken advantage of.

19. While sectarian or sectional identities cannot be disregarded, education must endeavour to promote Indianness among children. It would involve a subordination of personal and group interests to national interests, a tolerance of other points of view, an understanding and appreciation of what different communities have contributed to the culture of the country, a sense of responsibility and accountability for personal action etc. A conscious effort has to be made to widen the scope of relationships, which should transcend narrow and clanish loyalties.

Constraints

20. To be really child-centred, education should be tailored to individual differences. Heridity provides the basic potential. The condition in which a child lives and grows influences responses that he/she will make to various situations. Except for basic physical responses, such as with-drawing hand when touching fire, the response patterns of individuals are characterised by a very wide variety. Responses vary because stimuli and more importantly, their perceptions vary. The experience already gone through determines how one will react in future. And, children go through different and diverse experiences.

21. Can education really cater to the needs of individual children. The needs being so variegated, formal structures would find it difficult to cater to each and every need to every child. The cafeteria approach to educational programmes, which may be possible when resources available are in plenty, cannot be adopted on a universal basis. Even the cafeteria might not be able to provide a menu which caters to every taste. It is not only a question of material resources. The main difficulty will arise from the non-availability of manpower which is competent and versatile enough to be able to respond to and take care of a diversity of children's needs. The existing classroom situation and the pattern of

education of teachers allows educational effort to be directed by the concept of the average child. Classroom and school organisation finds it difficult to be flexible so as to meet adequately even the needs of a handful of children requiring special attention - the gifted or the slow learners, for instance. For reasons of an alternative model, which not only is not available, but might also be difficult to support, the present organisational structure will prevail. The dilemma between a formal structure which allows an ordered sequencing of events and experiences and one which allows the provision for individual differences will remain only a topic of discussion.

22. The emphasis on future orientation of schooling is probably a major bottleneck which prevents designing of activities for meeting the present needs of children. Instead of allowing them to enjoy their childhood, we prepare them for future roles, almost wanting them to grow into mature adults overnight. If children can be a "nuisance" for parents, they can be much more so for a teacher who, although a surrogate parent lacks the parental patience, love and concern for the child. For many children in poor households and slums, there is no childhood. The society, for instance, is no longer shocked at the hunch backs of the carpet-weaving children.

23. The two conditions necessary and essential for promoting child-centred education seem to be the autonomy and the competence of the teacher. In a situation where the tasks of the primary school teacher are prescribed and defined - for example, the syllabus, number of periods per week and so on - child-centred education is an idea to be talked about in educational reports but not seriously practised. The teacher in the Indian setting has hardly any say in syllabus making. He is not trusted. He is not considered responsible. He has to be told what to do and often how to behave. He has no wherewithal to transact curriculum in any meaningful manner. That he/she continues to plod along and show some commitment and zeal is quite puzzling.

24. Poverty and unemployment are two important factors which compel people to seek and continue in teaching profession in spite of low remuneration, difficult working conditions and low social prestige of a teacher's calling. It is not the highly motivated and the most interested in child development who opt for teaching. To expect such teachers to be innovative and creative, which child-centred education requires, is asking for the moon. Teacher education programmes do nothing to ignite the spark that might be latent in some who "want" to be teachers. And the reward structures available in society compel the talent to seek pastures which are definitely greener.

25. Public examinations, which have such a significant and deadning influence on student life and the functioning of a school, are the other major bottlenecks which negate any effort to change school programmes and make them more flexible to suit children's needs. The performance at examinations determines, largely, not only what kind of a student you are but also what kind of a person you are to become. Non-detention at the elementary stage of education stage of education will not help. The upward mobile keep their sights directed to a concrete and specific goal. Children drop out not only because they want to but more so because the dice is loaded against them, and in spite of the advocacy of non-detention, which probably is practised only in inefficient and ineffective publicly-maintained institutions children continue to be detained on the basis of their performance in 'mini-public examinations' conducted as rehearsals for the grand performance. As long as the effectiveness of schools and of teachers is determined and rewarded by pass percentages and proportion of distinctions, non-detention as a policy, like so many other policies, will remain only a pious hope.

26. Earlier, we had asked a question: what are the bases for syllabus making? The requirements of the third level of education seem to exert an inexorable influence on what will be taught at the second level and of the latter on the instructional programme of the first level. At best it is a process of miniaturization. For instance, Indian history is studied all through with the outline getting filled with details at successive stages. Foreign models determine the content and structure of syllabus. Modern Mathematics and modern Science were, for instance, introduced in Indian schools not because they were good - which they might have been - but because the bandwagon of a panicky United States had to be followed. Now modern Mathematics, having been found not really necessary for super sputniks in space, our educationists have picked up the battle cry of "return to the basics". The current proposals for educational reforms are again being advocated in pursuance of the American Report: "A Nation at Risk".

27. The stranglehold of examinations and the parchments that students get have been reinforced by the criteria used in society for the rewards that it offers - monetary as well as social. Certificates certify a person's economic and social position. Education system consequently promotes behaviours which are suitable for remunerative jobs and a bargaining position in the marriage market. Any one who

deviates has to bear the cross and pay an enormous cost for his deviance. A system of this kind would find it difficult to produce people who are creative and innovative. Society, by rewarding those who behave like 'Joneses', reinforces the tendency to conform.

28. The system with the prescribed requirements would not allow, for instance, a Tansen to be recruited for teaching music in a college. Even Shanti Niketan, which did not conform to the usual procedures for faculty recruitment and instructional programming could not escape the ever spreading tentacles of the University Grants Commission. The system, as it had evolved, relies heavily on paper qualifications rather than on talent and accomplishment. In a system of this kind the innate potential and inclinations get side-tracked and, unless an individual is ready and willing to pay the price for being extraordinarily deviant, he/she joins the rat race. Schools abet it. In these conditions why should one talk of child-centred education when all the compulsions are in the direction of providing a programme which is uniform and deadening.

29. The drive for uniformity is often conditioned by the perception that individual and group identities are somehow disruptive of national unity and national identity. In spite of decades of experience, we still fondly hope

that a uniform curriculum with its core elements, will help in wiping out group identities and sectional loyalties. In fact, the experience shows that education sharpens these identities, making individuals conscious of their distinctness. Since complete sub-merging of identities is neither possible nor feasible, education, as a process of socialisation and conversation of culture, should show awareness of these identities. While recognising their significance, schools should attempt to promote among the children an Indian identity which is not in conflict with individual or group identity. In a culture which does not insist upon a single path/^{to} truth, it is not desirable to suppress individual ways of thinking and behaving. Divergence and difference should be accepted as the basis of Indianness. No educational policy planner has the moral right to preach patriotism and national unity to people who, time and time again have demonstrated a commitment to national integrity and national independence. After all it was the common man who fought and suffered for freedom. Most of the planners and their children were at that time too busy to carve out profitable careers for themselves.

What Can be done?

30. Given the above context, is it rational to talk of child-centred education? Is it feasible? The broad conclusion that one arrives at is that, in a real sense the child-centred education is not possible of being provided. One tends to doubt the intentions of the government to seriously promote and provide for child-centred education. Like so many of its statements, such as those on poverty removal, child-centred education would seem to be merely a "slogan". The National Policy on Education and the Programme of Action do not show that the government had, at any time, seriously considered the implications of providing child-centred education. It seems merely a cliché which teacher educators have often advocated to new entrants to teachers' colleges and which they know cannot be implemented.

31. The best course of action, assuming that the government is serious, would be to design a developmental strategy in relation to child-centred education. It needs to be accepted with honesty that educational development in India will never have the needed resources money, material and manpower - to implement a programme of child-centred education on a nationwide scale. It cannot do so even in one fourth of the primary schools. Can the government, therefore, as a measure of good faith make a serious attempt to design and implement a pilot programme on a reasonably large scale, using the institutional resources that it already has?

32. One could, for instance, think of a "child-centred" educational experiment in respect of selected tribal areas. It should be possible to identify areas:

- which are culturally more or less homogeneous
- or relatively small to be manageable
- have yet not developed the competitive orientation for certain types of education and jobs
- in respect of which substantial literature on needs, aspirations and handicaps of the people exist

33. As a first step it would be worthwhile to document the evidence on:

- how children grow in these tribal settings
- socialisation practices that prevail
- the educational potential of tribal life
- the aspiration level of families
- suitability of tribal dialect for education

34. On the basis of this information, a programme of education suited to the needs of children and communities, could be designed. The programme would include:

- the formulation of a curriculum encompassing the total programme of the school
- formulation of a syllabus for various activities
- preparation of print and non-print materials

- selection and preparation of teachers
- evaluation of processes and outcomes

These could be introduced in selected areas.

35. Even if such a plan of action were formulated and implemented, it would be difficult to say with certainty that the needs of every child in the area have been met in terms of the strict interpretation of the term. Teachers, how-so-ever they may be educated and trained, would find it difficult to deal with a situation which is not precisely defined and where only the broad contours of the tasks to be performed have been laid down. Child-centred education is almost anarchic in respect to content and format. They have to be continuously changing. If at all, only the teacher would have an outline which provides some order, coherence and sequencing to tasks. He/she will have all the freedom to plan and a challenge to face. These might be too inconvenient to be seriously considered and planned for.

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TITLE OF PAPER: NEED AND NATURE OF EMOTIONAL EDUCATION
FOR CHILDREN: A RATIONAL-EMOTIVE APPROACH

C.G.Pande*

Educational Objectives Revisited :

Cognition (understanding), affect (feeling) and conation (reacting) are traditionally regarded as the three aspects of human behaviour and have been studied in Psychology as such. Education in India (and for that matter the world over), which draws heavily from the knowledge of psychology in formulating its models and techniques, has so far focussed primarily on the development of cognitive and conative skills in students. Teaching of affective or emotional skills has not received the attention it deserves. This paper is intended to highlight the importance of emotional education and to suggest the possibility of incorporating ^{it} in the general philosophy and practice of education.

Analyse the teaching currently imparted to students right from the nursery school onwards. You will find that it is mainly directed towards teaching adaptive and socially desirable behaviour (conative) and to develop various intellectual competencies (cognitive). Over the

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years, newer and newer models and techniques have been developed by educational psychologists to make this training for cognitive and conative competencies more and more effective and of greater practical value. The exercise has paid dividends and there is little to be regretted about our performance in that respect.

Educationists have, however, failed to realise that emotional life of human being is also an aspect of human behaviour in which competencies matter. Probably, they have been under the presumption that emotional development takes place in the natural course as the individual grows in age. There is nothing that educationists or teachers need to and can do in this respect. The child-rearing philosophies and practices followed by parents are considered enough to achieve normal emotional development of children and there is little or no need of systematized education of children for this purpose. Presumption may also be that there always are corrective experiences in one's life which may set right irregularities in emotional development, if they occur. A critical review of these presumptions and necessary modification in them is called for.

Need and importance of emotional education:

One often comes across cases of individuals who are conatively and cognitively well-equipped but experience difficulties, essentially emotional in nature, in translating them into actuality. This represents the cases in which actual performance of individual falls short of the performance expected on the basis of our knowledge of individual's capacities. Lowering of performance due to test anxiety, inability to progress ^{because} of a strong fear of failure, a consistent self-defeating behaviour due to intense depression, anger or guilt are all examples which go to convince anybody that effective and adaptive functioning does not necessarily follow individual's sound cognitive and conative equipment. The causes of individual's lower than expected performance are essentially emotional, a fact which has been neglected by those concerned with individual's upbringing at home and school. When crores of rupees are spent on training in cognitive and conative skills but actual performance remains below the expected level, the investment is considerably wasted. Such a waste, if carefully calculated, is colossal and can be saved by minimising factors responsible for failure in using the cognitive and conative skills fully. Part of the waste which is due to poor affective or emotional skills, can be saved by making emotional education a part of our school curriculum.

It is, therefore, imperative that educationists turn their attention to healthy emotional development as an equally important goal of education and use their theories and techniques for this purpose. For schooling, essentially, is a long range concerted effort not only to teach curricular courses but also to help the child grow up in many ways and assume adult responsibilities which will presumably be creative, productive and enjoyable. It should aim at developing a reasonably independent-thinking, self-actualizing and minimally disturbed person.

What can Psychotherapy offer? * *

Psychotherapy, during the last two decades, has developed both in its techniques and coverage of target population. Consequently, psychotherapy which was traditionally restricted to well-defined clinical groups is now extended also to normal persons who are susceptible to emotional disturbances leading to self-defeating and maladaptive behaviour. Philosophies underlying various therapies and their techniques are being so developed that they can be adapted to and incorporated in the general scheme of education beginning early in life.

Rational Emotive Education:

Should educationists in India think seriously of the need for imparting emotional education, Rational Emotive Therapy (RET) developed by Albert Ellis (1962, 1969, 1970) holds promise. In the theory of RET, emotional disturbances and handicaps or neurotic and psychotic symptoms suffered by a person are referred to as point C (emotional consequence). These emotional consequences are not primarily caused by various Activating Events (point A) which occur in human life. They may cause annoyance, frustrations, rejections which, in turn, contribute to his emotional consequences at point C like anxiety, anger, depression, hostility etc. The disturbances at Point C are really caused by various Beliefs (at point B) held by the individual and the self-talk based on them which he has with himself. The following illustration may explain the A-B-C mechanism of emotional disturbance.

When a person fails at an examination or is rejected by others he may tell himself "how terrible that I failed?", "I must succeed in everything I undertake", "I am absolutely a worthless person for failing or not being rejected." The person talking to himself in this way will undoubtedly feel anxious, depressed and worthless. The beliefs he holds (reflected in his self-talk) are irrational, unrealistic

and meaningless as they are unfounded and yet vehemently adhered to by him. Instead, if he tells himself "it is better to succeed but it is not the end of the world if I have failed once;" "Failure is after all a human phenomenon". "One failure does not make me totally worthless", "Failure actually tells me where I am wrong or falling short". With this kind of self-talk which is more rational and realistic, his feelings will be appropriately marked by disappointment, regret, mild frustration all of which will contribute towards motivating himself to do better next time or reducing the possibility of being rejected or failing in future. The following chart explains the differential consequences of rational and irrational self-talks in relation to an unwelcome happening.

Insert Chart here

Whether the emotional consequences of happenings around will be mild and appropriate leading to self-fulfilling behaviour or inappropriate and severe leading to self-defeating behaviour will depend essentially (as the illustration shows) on what beliefs individual holds and what he tells himself in relation to the negative happenings. Appropriate feeling and the likely self-fulfilling behaviour

comes only with rational and realistic beliefs and self talk, whereas irrational and unrealistic **self-talk** invariably lead to intensely inappropriate emotions and self-defeating, non-adaptive behaviour.

Who is to inculcate rational rather than irrational, realistic rather than unrealistic beliefs? How to develop in a person the habit of talking to himself rationally and realistically and at what age can the beginning be made? What are the techniques to be followed to achieve the goal? These are some of the questions that become pertinent if educating children to handle their emotions appropriately is considered important.

One, and probably the most effective, way ^{is} to teach the individual to acquire rational and realistic beliefs. Educationists and those concerned directly with the teaching of children have to take the task on themselves if they regard development of wholesome personality as the ultimate aim of education. If the beliefs acquired and the habit of talking to oneself are irrational and unrealistic, the individual has to be taught to vigorously challenge, question and dispute them at point D (Dispute). He may question himself "why and how is it possible that I have failed? Where is it written that I must succeed everytime? Is there

any human being who has never failed in his life? How do I become worthless and rotten just because I failed or got rejected?" Persistent and forceful countering of his unfounded, irrational beliefs will enable him to see things differently and events will be less disturbing for him though he continues to maintain his likes and dislikes as a human being. Intention of the philosophy or practice of RET is not to eliminate emotions from human life but to minimise emotional constriction or over-impulsiveness which not only leads to self defeating behaviour but also contributes ^{un}to/happiness.

Previous experiments

That emotional education is a goal worthwhile and can be pursued in a school setting is conveyed by what Ellis (1971, 1973) has done at the Living School in New York. Knowledge of what is done at the living school will help us plan out strategies and programmes with modifications necessary to suit our cultural conditions.

Alongwith regular academic curriculum, instructions are imparted to children in rational living and how to handle their emotions in a healthy manner. This is done in the course of classroom lessons, during playground activity, while the teachers are normally interacting with the children,

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Alongwith regular academic curriculum, instructions are imparted to children in rational living and how to handle their emotions in a healthy manner. This is done in the course of classroom lessons, during playground activity, while the teachers are normally interacting with the children,

through audiovisual aids and other media. Thus the programme of emotional education is incorporated into the entire school curriculum and extra curricular activities.

Before the child is admitted, every parent is told that emotional education will be a regular part of classroom activity and that he will be expected to attend monthly work-shops at which various aspects of childrens' emotional education will be discussed and parents' full cooperation in supporting this education will be solicited.

From the 1st grade onwards, the child is taught to realise irrationality in his beliefs acquired through indoctrination and to dispute them and replace them with more realistic and rational beliefs.

Through various exercises, he is taught to talk to himself, in relation to happenings in life, in a rational, realistic and meaningful manner.

Periodically, students are encouraged to take up difficult tasks where they are most likely to fail, and are taught to accept failure without denigrating themselves or feeling depressed. This is done by teaching them to talk to themselves in relation to the failure in a more rational and realistic manner. At times, deliberate failure experiences are arranged for the pupils and told how to

handle them. Trying to create an atmosphere of schools without failure, as proposed by Glasser (1969), would be unrealistic. Instead, children better ^{learn} that reality is filled with failures and hassles and learn to accept it as such.

Regular group-counselling sessions are held by teachers for children wherein children bring up their emotional problems or teacher brings up problems of pupils noticed by him/her in school-situation. The whole group, including the teacher, is involved in working out solution, to the individual's problem being discussed.

At monthly workshops, parents are expected to bring up emotional problems of their child at home. Many times, parents themselves become unduly anxious about the problems of their children. Before problems of the children are taken up in the workshop, the parents are helped the RET way to reduce their anxiety. When this is achieved, they are in a better position to help their children in handling their emotional problems.

Specially prepared Video-films in which healthy handling of emotions by children and adults is featured are shown to the children as an aid to emotional education.

Training of teachers:

If teachers are expected in their routine to educate their students emotionally, the entire process of training of teachers needs to be reviewed and content of courses modified in view of the additional objective. Unless the teacher assimilates the philosophy underlying a given form of emotional education and is thoroughly conversant with the techniques, mere inclusion of emotional education in the general scheme would serve no purpose. Educational planners, therefore, will have to provide for training of the teachers themselves. This can be done better by requiring every teacher to undergo training in techniques of emotional education, since emotional education cannot be introduced as an independent subject of study in the curriculum requiring specialized teacher to teach the subject. In addition, services of a trained therapist may be taken for organising the extra-curricular parts of the emotional education programme and for dealing with problem cases requiring special attention.

References:

- Ellis, A. Reason and Emotion in Psychotherapy N.Y. Lyle Stuart, 1962.
- Ellis, A. Rational-Emotive Therapy. Jour. of Contemporary Psychotherapy, 1969, 1:82-90.
- Ellis, A. "The Emerging Counsellor". Canadian Counsellor, 1970, 4: 99-105.
- Ellis, A. Rational-Emotive Therapy and its Application to Emotional Education. Paper read at the 17th International Congress of the International Association of Applied Psychology, Liege, Belgium, July, 1971.
- Ellis, A. Emotional Education at the Living School in Counselling Children in Groups, Edited by Merle M. Ohlsen, N.Y. Holt Rinehart and Winston, 1973.
- Glasser, W. Schools without Failure, N.Y. Harper & Row, 1969.

TITLE OF PAPER: PSYCHOLOGY OF THE CHILD AND THE PRIMARY SCHOOL TEACHER

Baqer Mehdi*

It can hardly be overemphasized that psychological factors play a very important role in learning. Unfortunately, the teacher, so far, has been mainly concerned with the content of education alone. His method of teaching too has largely remained unchanged. In spite of the fact that he has now to teach a larger variety of content and has to deal with an increasing range of individual differences in the classroom, he still prefers to use one single method of teaching, namely, the 'talk-and-chalk' method, and mainly relies on the use of textbooks. Hardly conscious of the fact that the child is a thinking, feeling, and willing organism who is constantly interacting with the environment in which he is placed, the teacher treats him as though he is a mass of so much clay or plasticine on which certain impressions have to be formed. The teacher feels uneasy and often frustrated when he finds that the impressions he wanted to make are not readily formed. His raw material, that he is, the child is not quite amenable to a mechanical type.

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of handling. Not only that he wants to create his own impressions, he is also capable of setting at naught any effort on the part of the teacher to force him to behave in a certain way. The child's rebellious attitude and behaviour often puts the teacher off his feet and the climate for learning is spoilt. All this happens mainly because of a lack of understanding on the part of the teacher about the psychology of the child. There are many factors in the intellectual, emotional, and personal-social life of the child which criss-cross the process of learning, and unless the teacher has an intelligent understanding of these factors, his teaching will at best be mechanical and of a routine nature. It will neither be interesting to the child nor satisfying to the teacher himself.

In the present paper the author intends to bring out some of the more important factors which have a bearing on teaching and learning and are particularly concerned with the psychology of the child. At the outset it has to be pointed out that the desire to learn, to know and understand, is an innate urge which is so clearly noticeable in a child. Although the sources from which a child learns are numerous, school is considered as an important source for all formal learning which the society wants him to have.

It is generally believed that teachers who know their subject and have also been trained to teach children by the use of certain methods can do their job of helping them develop their all-round personality fairly well. But experience has shown that this does not happen to be case. Teaching-learning in schools today is at best a mechanical and routine activity devoid of charm for the teacher and any worthwhile meaning for the child. There seems to be something lacking in the total process of teaching and learning, which makes our education a dull and drab activity. Perhaps there is no rapport between the teacher and the child. The teacher does not understand the child and the child is a little confused about the role of the teacher in his life. Unless the teacher understands the child, in other words, unless he knows his psychology, he cannot deal with him in a way in which he can effectively influence his behaviour. A mere theoretical knowledge of child's psychology and principles of learning may not be enough. The teacher should be able to relate this knowledge to the day-to-day situations arising in the classroom and outside. What the teacher needs is an understanding of those aspects of child's psychology which concern child's psycho-motor, intellectual, social, and emotional development. A smattering of theoretical knowledge about the laws of learning and similar

other tit-bits of information about child psychology learnt at a teacher's training institution cannot serve the purpose.

We shall discuss here some of the characteristic behaviours of children at the primary stage which the teacher needs to know so that he may plan his activities keeping them in view. We have divided them under three heads:

- (i) Child's Body and his Senses, (ii) Child's Emotion; and
- (iii) Child's Intellect.

(i) Child's Body and his Senses:

First of all, the teacher has to understand that the child has an enormous fund of physical energy which imbue him with tremendous activity. He loves to take part in all types of activity, whether it is games or some socially useful productive work. He is ready to learn all that is related to the activity in which he is involved; even if it means some serious study on his part. The motor-mechanism of the child urges him for more and more activity which can be fruitfully utilised not only for the development of his motor abilities and manual skills, but also can become the basis for the development of his mental abilities. Each well-planned manual activity does involve some kind of mental work. That is why, it has been stressed again and again by all educationists that the

the process of education during childhood should centre around some form of manual and productive work. Such an approach has a strong basis in the psychology of the child. His fund of energy and his natural desire for activity can be fully exploited by the teacher in motivating him for a variety of tasks, which have educational value for the child and help him in his development as a 'learner', as a 'person', as a 'citizen' and as a 'worker'.

Besides gross bodily movements and physical activity, the child is also capable of using his senses in a variety of ways. The most important sense organs which he tries to use are his eyes and ears. It is through the use of his eyes and ears that he learns about the world around him, and the more keenly he uses them the more perceptive he becomes of his environment. Right from the time he consciously begins to use his eyes and ears, he begins to make very important discriminations which ultimately become the basis for good observation. It may be noted that training in the use of senses at an early age makes for better learning in every sphere of life later. Senses which are dulled through lack of proper use, ultimately result in poor learning. Besides these senses of seeing and hearing, the child's senses of touch, smell, taste also

need to be properly utilised for creating in him a keen interest in things around him. Proper training of his senses help in developing his perceptions which underline all intelligent learning.

(ii) Child's Emotions :

The child symbolizes the hopes and aspirations of his parents. But very often the parents, and later the teachers in schools, fail to appreciate the role that emotions play in the life of the child, and the way the ~~emotional~~ experiences of the child influence and shape his behaviour. Normally, there is a relationship of love between the child and his parents. But much depends on the emotional life of the parents themselves. Where it is disturbed, the attitude of parents towards children is far from that of love. It is often downright stubborn and even hateful. They are often so harsh on their children and so unreasonable in rejecting their just demands that the child is emotionally upset. Dependent as he is on his parents for his physical comforts, he often meekly submits to the parental authority. But his emotional life is so disturbed that problems of maladjustment at home and also in school arise at a very early stage. The situation gets worsened as the child tries, often unconsciously and

sometimes consciously also, to compensate for the loss of face which he has suffered at the hands of his parents. This is the beginning of negative behaviour in the child leading to acts of indiscipline and even anti-social behaviour.

The teacher has to understand that there are psychological reasons behind those behaviours of the child which make others call him as educationally backward, socially undesirable, and emotionally unstable. We must remember that we cannot divide the child's personality into compartments. Any experience - personal, social or emotional - leaves its impact on the whole personality of the child and influences his intellectual, social and moral behaviour. If the teacher thinks that by assiduously teaching his subject he is doing the job he is meant for, he is sadly mistaken. He should know that his job is not merely to teach a subject, but to teach the subject to a child. It is ultimately the child who is going to learn the subject, and so it is no less important for the teacher to know the child than to know his subject. Knowing a child means, most importantly, knowing his emotions which colour all his behaviour. In fact, children are much more easily affected by emotions than are adults. Their entire being is in fact governed by one emotion or another.

That is why there is so much need to deal with children sympathetically and with understanding. Where there is love prevailing in home; the child develops a sense of security so essential for the healthy development of personality. He develops self-confidence, learns to respond with spontaneous feeling of affection and love; is motivated to achieve more and more in life, and is always bursting with excitement and unrestrained activity.

(iii) Child's Intellect :

We often under-rate children in-so-far as their thinking and reasoning powers are concerned. They may not be able to think and reason about abstruse problems, but they do think and reason all the same. They think and reason in the world in which they live - the world of make-believe, as it is called. Their imagination is rich with fantasy and make-believe. They are spurred to action by their love for curiosity. They are always trying to explore their environment. Curiosity comes naturally to them. "Let me see it, let me do it, and let me say something about it", are their enthusiastic expressions; once they are exposed to something new. Activity methods stimulate their intellect and build their interests. Not only do they take interest in solving problems which are posed to them, but they also can construct new problems.

By nature, they like to create, and they can create best in the language in which they can express easily. Arts provide them the most useful language for expression. It is unfortunate that children are not given enough opportunity to use the universal language of Arts which comes so naturally to them. Instead, they are forced to pour on books and spend most of their time on learning the language of books which the society wants them to learn. The balance between the language of arts and the language of books is often not maintained in our school curricula. This has a detrimental effect on the development of child's intellect. Dull books, mechanical teaching and examinations which are imposed upon children hardly interest them.

"No studies", they yell with a sense of relief, once the examinations are over. Not that the children do not want to learn - in fact, they are the most avid learners - but the problem is that the way they are made to learn things make them sick and they begin to hate learning; they develop a negative attitude towards books, teachers, school and all that usually goes under the name of education. This

indeed is a sad commentary on our system of education. Instead of developing their interest for learning, we scare them away from learning in one way or another. Let us think why it is so, and let us start doing something about it.

Child Development and Education :

The process of education is, directly or indirectly, concerned with the development of the child. The school provides conditions and opportunities which foster among children desirable qualities and characteristics which ensure healthy development of their personality. This development can be studied and analysed both from the point of view of the different roles the child has to play in life, such as his role as a learner, as a person, as a citizen, and as a worker, and from the point of view of the different aspects of his personality like motor, mental, social, moral, emotional, and psychological, which would also include his needs, motives, interests and attitudes. It is important for the teacher to keep in view both the aspects of development in order to function effectively as a teacher.

Child's Roles in Life :

As the main function of education is to prepare the individual for life, the school should help the child to develop in him those characteristics and behaviours which would enable him to successfully perform the various roles he is to play in life. As we look at the life of the growing child, we find that he is to play four major

roles in life. These are his roles as a learner, as a person, as a citizen, and as a worker, Corresponding to these roles, we can identify the developmental objectives of education which the teacher should be able to achieve with the help of the curriculum he is using.

(i) Development of the Child as a Learner:

This aspect of child's development refers to those abilities, skills and attitudes which the child must develop in order to become not only an efficient acquirer of knowledge, but also its user and producer. His role as a learner further implies that the child will be able to become a life-long learner and will continue to make use of knowledge for the best purpose in life.

(ii) Development of the Child as a Person :

As parents, we all want that education should help the child to become a better individual. We expect desirable changes in his personality and behaviour as a result of his education in school, and we call in question any education which does not change the behaviour of the child in desirable directions. It is a common experience of all of us that we hold education responsible for anything bad which the child does at home or outside. A child who

misbehaves with his parents, uses abusive language, tells lies, steals or bullies others is considered to have received poor education in school. This means that we expect from school much more than is implied in book learning and passing of examinations. What immediately comes to our mind when we call a child an 'educated' child is his personal behaviour and his dealing with others. It is indeed unfortunate that what we consider as the most important out-come of school education, is exactly what we neglect most when the child is in school. An important developmental objective of education is to help the child to develop as a person. There are certain qualities of character which make a person what he is, and it is these qualities of character that have to be fully attended to, for his proper development in school. As may be easily observed, it does not require on the part of the teacher any extra time to develop these qualities. They are inherent in the curriculum itself which the teacher is using. What he has to do is to give some special attention to these qualities at an appropriate time, so that they could be developed easily in the child.

(iii) Development of the Child as a Citizen :

Apart from his role as a happy and effective person, an individual also has to play his role as a citizen. The

behaviours and attitudes which are essential for an individual to be called a good citizen are formed early in life. Besides knowing his rights, the child has to learn what his duties are towards his family, towards the community in which he lives, towards his school, towards his country, and towards humanity at large. He has to learn his responsibilities in relation to all those with whom he comes into contact, e.g. his friends, his neighbours, and others who live in the community. We have tried to identify some of those qualities, behaviours and attitudes which go to make a child a good citizen.

(iv) Development of the Child as a Worker :

In order to play more effectively his role as a worker later in life, the child has to develop habits, skills and attitudes which are particularly useful for him as a worker. In fact, these attitudes, habits, behaviours and skills start developing right from the early stages of child's life, and especially during the primary school years. There is a mistaken notion which many of us hold that work is something different from what we call education, and there is a further feeling that it interferes with learning and hence is a waste of child's valuable time which he could otherwise spend in his studies. This wrong notion

about work arises from the fact that we seldom appreciate the fact that work has its own educative value. There is also a tendency on our part to forget that a person is ultimately going to spend a large part of his life as a worker for which he needs adequate preparation in terms of habits, attitudes and skills. When can these habits, attitudes and skills be developed most effectively ? Obviously when the child is still growing and is in school. The teacher has to be fully conversant with them, so that he may be able to help the child in a proper manner.

ALL-ROUND DEVELOPMENT OF PERSONALITY :

If we only look at child's development from the point of view of the roles that he has to play in life, we may miss some very important points with regard to his personality development as a whole. The teacher has to understand that the child is developing as a total entity. He is developing physically, mentally, socially, emotionally, morally and also psychologically at one and the same time. We cannot put these different aspects of development into separate compartments and work for them individually. Certain emphasis may be discernible in our effort at helping the child to develop, but our goal has always to be the all-round development of the child's personality.

When we talk of the all-round development of child's personality, what we mean is that the child should be helped to develop the multiphasic aspects of his personality. Education, especially at the primary stage, has a major role to play in this regard. The school has to provide opportunities and experiences to the child which would help him in his motor, mental, social, moral and emotional development. Even the four roles of the child's life discussed above imply the psychological development of the child as a whole. A primary teacher, thus, can hardly afford to overlook the psychological aspects of child's development if he has to do his job well. It therefore becomes imperative on the part of the teacher to understand the processes of growth and development. The needs, motives, interests, and attitudes of the child which form the cornerstone of his behaviour and help us to understand why he behaves as he behaves, have also to be fully understood by the teacher.

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TITLE OF PAPER : EDUCATION OF THE DISADVANTAGED

Neshla*

It has become fashionable today to be concerned with the educational problems of the so-called disadvantaged children. In very recent past, concern in this area has spread from the sad and lonely lament of the class-room teacher confronted with a group of children whom he could not teach, to a nationwide movement. The educational band wagon is, once again, on the move. Perhaps, as educators, we should be gratified with the widespread interest in the learning problems of a segment of our school population long neglected. But, with the gratification comes the memory of other educational band wagons, gathering momentum as they rolled across the nation only to slow down and come to a halt long before significant or durable changes had taken place. And only a few stalwart souls, here and there, remain to keep the memory alive and while the band wagon, with all its fanfare, its glamour, is on the move, we have a sense of urgency to do something--bring the activity programme into the elementary school, focus our attention on the pupils' life adjustment, organise buzz groups and run class discussions by the latest tenets of group dynamics, create special classes for the gifted, install closed circuit television for large group instruction or look to

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teaching machine as the great panacea for individualization of teaching. Each in its time has captured the educational imagination. But, too often, what is done in haste, spurred by the pipes and drums, or the immediately available funds is but a shell of the intent, based on too little knowledge and rarely integrated in lasting fashion into the educational fabric. The urgency to do something, although often strengthened by pressures outside the educational enterprise, may also reflect the educators' unconscious recognition that there is little time, that soon another fad will become visible over the educational horizon and rolling before it, flags flying and trumpets blaring, will be a new band wagon, beckoning to all to come aboard. But before this another fad flares the educational institutes, fumes the intelligentsia and flicks society, it is high time that we dedicate ourselves wholeheartedly to the cause of the disadvantaged.

But then the question is who are the disadvantaged?, It would be no exaggeration if I say, 'most of us'. This may be difficult to believe, but consider for a minute what 'disadvantage' has come to mean. "The slum child", according to Bernard Asbell", is a child of another world, our laws do not bind him, our standard middle class ambitions do not inspire him.... Teachers in first to third grades feel the child slipping away. By the fourth grade he has fallen behind. By the eighth grade

he may be as many as three years back, his mind closed, his behaviour rebellious. By high school age he is more than likely a drop out, headed for chronic unemployment, disdaining the outside middle class world that already disdains him, secretly contemptuous of himself, a waste of a human being. A failure". This is certainly a vivid picture of the pupils that teachers confront in poor, depressed neighbourhood. But are these the only disadvantaged pupils? If so, then we should be able to call all other children advantaged and the reverse of Asbell's comment should be true of them, for, as children of the cultural mainstream, presumably they observe our laws, score well on our I.Q. Tests and are easily reached by teachers. The general assumption is that these children progress well in the first three grades, move rapidly by the fourth, and by the eighth are working as fully potential, are clear in thinking, open-minded and exemplary in behaviour. By high school, many are honours students, headed for colleges, accepting roles in the middle class world which accepts them. In brief, we are accustomed to viewing these people as developed, successful members of society. But the question is, are they? At the very least, the answer to this question must take into account the disturbing incidents of juvenile crime among the middle and upper classes, the number of mainstream-oriented drop outs from the educational process at the high school and college levels, the extent of bigotry and dogmatism that exists among our so-called advantaged segments of .

society and a host of other factors. Indeed, answering this question properly requires a fresh examination of the very standards by which we evaluate advantaged and disadvantaged. Certainly, the meaning of disadvantaged must be broadened to include all these who are blocked in any way from fulfilling their human potential. This blocking can take place anywhere - in a slum, or in an affluent suburb where children may be neglected, over protected, ruled by iron-handed parents or guided by no rules at all. Middle class children may be compelled to study what does not interest them or allowed to forego true learning in favour of achieving marks. The schools have failed the middle class child as they have the child from low income families. The affluent child, who comes to school prepared to succeed in a mediocre, outdated educational process is also being short changed, and thus too, is disadvantaged. Simply because he does his home work, gets passing grades and eventually graduates is not necessarily a sign of advantage. Disadvantage, indeed, is a matter of degree. The poor suffer so greatly because they are on the bottom rung of an educational ladder which, even at the very top is inadequate.

Thus, the answer to the question as to who are disadvantaged, is more complicated than it seems. To quote M.D. Fantini & G. Weinstein (1968), the disadvantaged can not be defined by race, residence, jobs or behaviour alone. They are black, white, red & yellow; with or without parents, hungry or overfed; they are the children

of the jobless, the migrant workers or the employers. The only thing they have in common is that all are left out of a process which purports to carry all human kind, regardless of background, towards the same basic goals, physical comfort and survival and feelings of potency, self-growth, connection with others and concern for the common good. Any one deprived of the means to reach any of these human goals is disadvantaged, for it is the purpose of our democratic social institutions to advance the development of these human goals for all people. Failure in human goals attainment, is, therefore, a reflection of institutional failure and until our social institutions in general, and the schools in particular are equipped to satisfy these goals, full human development is thwarted. Until then we are all disadvantaged.

Of course, there are those who are extremely disadvantaged, and whose poverty and socially discriminated position severely, limits their human potential. But if we must focus on the extreme needs we must also realize that this is just a beginning. There are significant segments of population that lie both without and within most current definitions of the disadvantaged and which are not adequately described by them. Moreover, there are a host of causative factors, and perhaps, even more important, a host of potentially corrective resources, which such descriptions tend to obscure. As Miller has warned, sweeping descriptive generalizations are unquitable for

effective intervention. In fact, many experiences of even an advantaged child would be considered inappropriate, perhaps shocking, by the mainstream society. The Disadvantaged children do have experiences and these experiences arise from a very real culture, though they may be of quite a different order than those respected and valued by the dominant society and its formal educational structure. And it is a fact that the very notions of cultural and experiential deprivation have arisen from our conventional educational process and today, in education, it has become almost fashionable to look at the problem of educating the disadvantaged as a problem quite apart from the education of children generally. Indeed, many disadvantaged children can be considered culturally or experientially deprived only by the standards set by this dominant society. To quote Riessman,⁽¹⁹⁶⁴⁾ most attempts at classifying the disadvantaged have focussed on what is wrong or weak about this group and that not enough attention has been paid to its strengths. Therefore, with Meyer (1955) we could define the disadvantaged in terms of life chance which includes "everything from the chance to stay alive during the first year after birth to the chance to view fine arts, the chance to remain healthy and grow tall, and if sick to get well again quickly, the chance to avoid becoming juvenile delinquent-and very critically the chance to complete an intermediary or higher educational grade". Thus, 'disadvantaged' applies in some way to most children, to most adults as well, and traditional definition of the term must be enlarged to encompass most of the school population.

Still poverty and poor education go hand in hand. While the affluent disadvantaged get the best that an inadequate educational system can offer, the poor get the worst. Not only are the disadvantaged poor and not ready for the schools, but the schools, by and large, are not ready for them. When the child enters school, he moves into a different world, one which mirrors him in the same degrading terms he has come to accept as his lot. Poverty is a stigma that the school unwittingly takes as a sign of personal unworthiness. Poverty, indeed has a subtle crushing dimension. To be poor is to be stigmatized by our society. A man's worth is determined by how much money he has, the car he drives, the house he lives in, the clothes he wears etc. Lacking financial worth he also lacks personal worth. Moverover, he is all too willing to accept society's value definitions and consider himself a failure. He feels important, he believes there is little he can do about his destiny. Lack of money places the economically disadvantaged in a very dependent position leading to social withdrawal. Finally, this lack segregates him from others, especially from the well off group, who set the norms for society. Indeed, the depressing, oppressive appearance of the slum neighbourhood, alongwith general economic hardship, eats away at the aspirations and motivations of its inhabitants. No wonder that too often when the child enters school, neither the system nor the teachers seem to care about or to comprehend the only world he knows; indeed they seem to shun both him and it as ugly, sinful and

worthless. The activities required of the child by the school are meaningless and incomprehensible to him. The only society that accepts him is that of his equally frustrated peers and this peer culture offers the child the only realistic escape from his increasingly negative image of himself. Finally he gives up school altogether--perhaps with the dim hope that he may find employment--and thus freedom through financial independence. But, he has no marketable skills and the only jobs open to him are those which offer little security. Unable to satisfy his physiological and psychological needs, an individual trapped in this cycle, becomes frustrated and reacts by withdrawing or acting out. Even employers become more and more suspicious and untrusting of such poverty bound, socially outcast, chronically uneducated, chronically unemployed populations, and job opportunities become scarcer, dirtier, lower paid and more exploitative. With no job and no money, the individual is forced to remain in the slum where his children will most likely follow in his footsteps.

Children from such socio-economic groups certainly do not benefit from our present educational system as there has been relatively little concern for the fundamental effect that this system has on the individual's personal understanding of life--his own and that of the others among whom he must live. The school, to quote John Dewey, has the function also of co-ordinating within the disposition of each individual the

diverse influences of the various social environments in which he enters. One code prevails in the family; another on the street a third in the workshop or store, a fourth in the religious association. As a person passes from one environment to another, he is subjected to antagonistic pulls and is in danger of being split into a being having different standards of judgement and emotion for different occasions. This danger imposes upon the school a steadying and integrating office. Therefore, to reach the disadvantaged the school would have to start by accepting them. It would have to take lower class life seriously as a condition and a pattern of experience, not just as a contemptible and humiliating set of circumstances from which every decent boy or girl is anxious to escape. It would have to accept their language, their dress and their values as a point of departure for disciplined exploration to be understood not as a trick for luring them into the middle class as a way of helping them to explore the meaning of their own lives. Indeed, the heart of teaching lies in reaching for the content suited to the child, understanding its significance and building upon it so that it becomes larger and expands the child's frame of reference. That goal cannot be reached unless the teacher learns the language of the child. In practice, the rule is more often that the child is obliged to learn the teacher's language and that is where it ends.

Truly speaking the success of the teachers does not lie in ending a particular process of education but rather in mending it, in enriching it and nourishing it. As such, the teacher who is successful with any group of people is the one who respects the children in his classes and they, in turn, respect him. As teachers in slum schools look at their pupils, they see many children who are discouraged and defeated, even in the early grades, children who express their alienation from the school and the society it represents by aggressively acting out behaviour or by a kind of tuned out lethargy and listlessness. There are frequent transgressions against the ethical, moral and legal codes of society. Pupils seem to be making little effort to learn, show no desire to better themselves, to break out of its limits imposed upon them by ignorance. The teacher may feel sorry for them, realising the limiting circumstances of their lives or he may be angered by their laziness, their lack of effort, believing that they could if they would, but they will not, or he may write them off as hopeless, too dumb to learn, taking up time and resources that could be better utilised by pupils with more ability and greater motivation.

Indeed, to be really of some help, the teacher of the disadvantaged should respect his pupils and not because he sees them through the rose-coloured lenses of the romantic, finding beauty and strength where others see poverty and cultural emptiness. On the contrary, he should see them quite realistically as

different from his children and his neighbour's children, yet like all children coping in their own way with the trials and frustration of growing up. And he should see them, unlike middle class children, struggling to survive in the ruthless world of their peers, confused by the conflicting demand of the two cultures in which they live--the one of the home and the street and the neighbourhood, the other of the school and the society that maintains it. Like the anthropologist, the teacher should view the alien culture of his pupils not as a judge but as a student. He should understand the backgrounds from which the children come, the values placed on various achievements, the kind of work and life to which they aspire. He should recognise and understand the reasons of their unwillingness to strive towards future goals, where such efforts provide little reward in the present. He should know that many of the children bear the scars of intellectual under-stimulation in their early years. Familiar with the home life of the children he should know how rarely they are helped to name the thing they see and feel and have to recognise similarities and differences, to categorise and classify perceptions, to learn the word for the object and the phrase through which to express an idea or a feeling.

The teacher of such a group should also be aware of the various family structures from which the children come. The matriarchical family in which no father is present; the home where there are two parents, but both working, where one or both

parents are able-bodied but out of work recipients of relief-where the father is disabled and stays home while the mother works; where an extended family-grand parents, aunts, uncle and other relatives live together. The teacher should know the physical conditions in which these children live, their lack of privacy, the poor facilities, the absence of basic amenities etc. He should know the kind of jobs the parents have, their aspirations for themselves and for their children and what role they attribute to the school in shaping their child's future. The teacher should be well aware of the ethnic group membership of his pupils and how such membership shapes the child's image of himself and of his world. He should know something about the history, traditions, and social structures of the various ethnic groups-their unique culture patterns, their status in society, their blocks and frustrations which they confront and their perception of what life has in store for them. He should know that the language of his pupils is closely tied to the life they lead. While it may represent a complete lack or a distortion of acceptable language he should recognize its functional qualities for the pupils. Though this language is not the coin of the realm, it after all represents the only known and acceptable medium of exchange in the child's home or neighbourhood.

These and many other anthropological and psychological approaches affect the style of the successful teacher of the disadvantaged pupils. But while the anthropologist's task is

to describe and compare behaviour of various cultures and the psychologist's is to understand individual behaviour, the teacher's job is to modify it. Therefore, he must use his knowledge about his pupils and the world in which they live to guide him as he attempts to open more and more doors for them, and to help them to acquire the skills and knowledge with which to enter the new and open spaces which lie beyond. The teacher sees his task as preparing his pupils to make competent choices among potentially available alternatives. He is aware that with every passing year, the rapidly automating economy affords less and less opportunities to the minimally educated and more and more to the academically and technically trained and he communicates this understanding to his pupils.

Again, the teacher should meet the disadvantaged child on equal terms, as person to person, individual to individual, but while he should accept, he should not condone. He should clearly define limits for his pupils and group few transgressions. He should set the rules, fix the boundary and establish the routines with a minimum of discussion. With these boundaries he should be business like and orderly knowing that he is there ^{also} to do a job. But he should be warm and outgoing, adapting his behaviour to the individual pupil in his class. He should let each pupil know that he expects more than the pupil thinks he can produce, but his standards should not be so high as to become too remote to strive toward, and the attempt fraught with frustration. He should reward each tiny upward step,

be alert to every opportunity for honest praise, and, as much as possible withhold harsh criticism and censure when progress is slow or even entirely lacking. He should also be something of a showman, coming to his task with an extensive repertory of carefully constructed spirits and props into which he should breathe a sense of drama and high interest to capture the imagination of his pupils and hold their attention.

The teaching of the disadvantaged being a real challenge, naturally the teacher is expected to be a mature, well integrated person who respects his difficult, unmotivated and apparently unteachable pupils to whom he communicates his respect by setting high, but reachable expectations, by his impartial and consistent firmness and honesty and by his warm personal regard for each individual. In addition, the teacher should have a wide variety of material and procedures, the ability to devise new ways, to deviate from accepted procedures and courses of study but always to be aware of the knowledge and skills the pupils must eventually acquire.

Thus the teacher is closest to the learner, of all those involved in educational policy. He must interact with the pupils in daily reality and, therefore, he is most likely to be familiar with their needs, their problems and their assets. The teacher has learned, perhaps through trial and error, what will and what will not work in the class room, and what are the obstacles in the home or in the school life in the path of learning. Certainly,

successful teaching in the disadvantaged school lies in using these strong human needs as spring board of learning. The keys that unlock the doors are understanding of the child and his world, acceptance of him and his attitudes and offering help and approaches geared to his abilities and special needs. To those who face the awesome task of educating their charges to overcome their impoverished background, the task sometimes appears overwhelming as one teacher put it that to teach the disadvantaged, one needs the wisdom of Solomon, the patience of Job, and the strength and endurance of Samson.

Nothing denying, that the crisis of the disadvantaged has provided educators with a unique and epoch making opportunity for effective, new and penetrating reform. What will they do with this opportunity? Will they use it to perpetuate the unwieldy, ineffective and deteriorating status quo? Will they adopt a policy of wait and see, reacting only after the fact to societal demands? Or will they seize this opportunity to assume the roles of initiators, revising education to become the instrument of social reconstruction and renewal, of individual and social health and of human progress? Certainly this is a challenge of the disadvantaged to education. And this challenge can be met with successfully by bringing about basic changes in the educational procedures, principles and practices which can come only through an alteration in the behavioural roles played by those integral to the bureaucratic machinery. Such an

alteration will not be forthcoming with sheer money or authoritative mandates. Rather, they must evolve slowly subtly and naturally yet without any undue delay. To accomplish this requires that the human resources--both within and without the formal educational system--be fully and properly utilised. The most immediately available human resources are the school teachers themselves, but, in addition, there are those perhaps not presently connected with the school system but who can be brought in to take active part in the formal educational process, for example, students and professors of Education, volunteer teachers drawn from the community, teacher aides drawn from the older pupil population, professional social workers, psychologists and so forth. Even the NPE stresses that it is people's involvement in the educational reconstruction which will make the real difference. Thus armed with money, backing from a power source and with strategic help from such people, the educational reformer can go a long way in improving, enriching, brightening and beautifying the otherwise dull, dismal, and dreary world of the disadvantaged.

REFERENCES

- Asbell, B. The new improved American, New York; McGraw Hill, 1965. PP82-83.
- Dewey, John Democracy and Education, New York: Macmillan, 1962. P22

Fantini, M.D. Weinstein, G. The Disadvantaged-Challenge to
Education, New York: Harper&Row
1968 P.5

Mayer, K. Class & Society, New York : Random House,1955 P.23

Miller, S.M. The American Lower Class : A Typological Approach
Social Research 31 : I 1964 P.2

National Policy on Education, Govt. of India, Ministry of
Human Resource Development, Department of
Education, New Delhi,1986.

Riessman, F.R. The Culturally Deprived Child. New York ;
Harper & Row 1962 P.3.

TITLE OF PAPER: "CHILD--CENTRED EDUCATION--ADMINISTRATIVE
ISSUES

R.P.Srivastava*

The present system of school education in India suffers from many weaknesses. A very serious weakness is its uniformity--uniformity of methods, of content, of teaching schedules, of disciplinary practices, of evaluation and even of treatment of student of student-problems. The uniformity results in, as James B. Conant remarked, "a sense of distasteful weariness" among both teachers and learners. This uniformity also results in mutilation--mutilation of spontaneity of joy in learning, of pleasure in creating, of sense of self for both teachers and learners. Though a large majority of learners are unaware of such mutilation. Thus education in our country is generally not a pleasurable experience, either for teachers or for learners. We need to think of ways and means to make it so and to add meaningfulness to the teaching-learning process. I shall not discuss it here, but would like to say something with regard to making education an experience of joy for children.

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It is undoubtedly accepted that children's needs are many and varied. The fulfilment of such needs gives satisfaction & vice versa. Hence in very simple terms to make education an experience of joy besides other things we need to make it child-centred. The govt. of India has also stressed the need^{for} making education child-centred in order to improve the standard of school education.

The term child-centred, as defined in Woleman's Dictionary of Behavioural Sciences refers to " A school or institution in which the primary goal is the fulfilment of the child's present needs, rather than preparation for adult-hood.

A more comprehensive definition has been given in Blond's Encyclopaedia of Education which says that "The term child-centred education represents the practice of building education round the needs and interests of the child himself, based on a study of his natural development".

The Principle, popularly known as the Copercican Principle in education was advocated by Rousseau as a one to one tutorial system. Over the years other educationists have also defined child-centredness e.g. Montessori, Froebel, Mahatma Gandhi etc.

In the present days the humanistic psychologist Carl Rogers has advocated the principle of person-centredness. He believes that the person, any person contains within himself or herself, the potential for healthy and creative growth. The failure to realize these potentialities is due to the constricting and distorting influences of parental training, education and other social pressures, these harmful effects can be overcome if the individual is willing to accept the responsibility for his or her own life. If this responsibility is accepted, Rogers believes, we shall see the emergence of a new person, "Highly aware, self-directing, an explorer of inner space, scornful of the conformity of institutions and the dogma of authority."

The Principle of child-centred education advocates that learners are variable in their physical, cognitive and affective attributes and therefore educational methods and techniques should be geared to the interests, needs and individual competencies of the learners. It views each learner as a separate entity and aims at developing his/her various abilities. It views each learner as an important contributor to the body social and therefore stresses the need for developing social skills. It looks upon each learner as a potent creative force and hence advocates the need for

developing his/her creative energies to the full. Finally it views each learner as an important agent of social change and therefore aims at developing in him /her attitudes and values leading to positive change.

This is not to say that education today is totally not child-centred. However, there is need to focus our attention on the issue and direct our energies towards the development of learners. This is a joint responsibility of teachers and administrators. But the administrators, specially the principal, will have to play a more important role, because it is they who lay down policies and prepare the background in which the system of education functions. Therefore the Principal should take the lead in this direction. Of course, it must be acknowledged that child-centredness is not a magic wand that will change the educational scenario overnight. The system is there; it has come to stay. Certain circumstances will impede any change in this direction. These are given below:-

(1) The Sheer obstacle of members:-

It is very difficult to expect perfect rapport between teachers and learners where the number of learners is unwieldy. But this number cannot be slashed down.

(2) An important area of frustration is the structure of the curriculum, which is too often limited and inflexible to provide for the varied needs and abilities of the learners.

- (3) Often teachers are caught between an administration which demands "results" irrespective of methods and his own concern about the means to be employed.
- (4) An additional frustration arises when teachers recognize their own limitations - the schism between "What they know and what they do" seems to be beyond closure. Above this may be the pressure from fellow teachers to conform to established practices.
- (5) Children i.e. learners are not perceived philosophically by schools. They are not viewed as self-directed individuals. They are rather considered objects to be moulded and prepared.
- (6) The managerial and administrative policies of schools, also do not give importance to each separate learner, the policies are general and directed to the larger group.
- (7) The various curricular and co-curricular activities in schools are generally maintained by the teachers, not always in consonance with the **interest** of children.

These constraints logically indicate that in the present circumstances child-centred education cannot be conceived in its present form as a one to one tutorial system (as visualized by Rousseau). It can not be organised

only ~~around~~ a series of individualized instructional programmes. It neither visualizes cutting down the number of learners or increasing the number of teachers. Child-centred education is a practice born of a certain philosophical bias. It is a definite shift in perception-perception of the learner, the content, the method etc. It is a philosophy revolving around the individual child, in a wider perspective. It is an action related to the individual child, and it is **planned**, with a view to the child's uplift^{ment}. This change in perception, planning & practice is in the hands of the administrators, chiefly the Principal. It is he who should encourage as the champion of children. It is suggested that the following changes be made in administrative perception and organization of education :-

(1) Developing a proper conceptual framework regarding the child

Aries (1962) points out that only a few centuries ago children were regarded as miniature adults. Boulding (1979) states that for long the current social context created children with needs and rights. However in the modern times various international conferences and declarations have asserted that the child is no longer a pawn of the social context. He should be perceived as one contributing to a influencing relationships with parents and other adults.

School administration should view each child as the constructor of its own reality and an active contributor to its own learning. Each child should be viewed as an integral part of the cosmic ecological system, a psycho-physical force sharing its existence in the universe. The emphasis should shift from a belief in the child's social ineptness towards a recognition of the child's social skills. This is administrative significant because the way children are conceptualized makes a difference in the rights that are extended to them and the responsibilities they are allowed to assume. It is therefore suggested that children in schools be coopted to work on a few projects like the one's suggested below:-

- (a) Peer tutoring .
- (b) Active decision making in school bodies .
- (c) Supporting younger and weaker children at study time.
- (d) Running a kitchen garden to support the school mess programme.
- (e) Helping in the library to facilitate circulation etc.,

(2) Defining Institutional Objectives :-

Since the needs, interests and competencies of children are to be respected with a view to their future development, it is suggested that institutional objectives be geared away from generalisation like development of personality

etc. and more pin pointed relevant institutional objectives be laid down, e.g.:

- (a) Developing a scientific attitude.
- (b) Developing moral awareness.
- (c) Developing political acuity.
- (d) Developing creativity.

(3) Defining Instructional Objectives :-

The objectives of teaching and learning may also be pin pointed e.g. objective of recognition, recall, inference, creating etc. These must depend on the nature of the student population.

(4) Restructuring the Content :-

As Jencks, C. and Richardson, D.(1972) have rightly remarked, instead of an educational cafeteria, there must be a curriculum, which means that the courses and programmes that are offered must grow out of and reflect carefully considered conceptions of education. It is, therefore, suggested that the following curricular changes be made in view of the needs of the learners as well as the institutional and instructional objectives.

- (a) The content of courses should be revised in view of the latest developments in the field.

- (b) The content should be adapted to the levels of students maturity.
- (c) The content should be need-oriented i.e. the courses should be relevant to the regional needs of the learners like job possibilities, self-employment opportunities etc. e.g. in an area where the leather Industry flourishes, learners may be taught the skills of the trade through various courses.

But this economic need is not all. The Principals should cater to these needs of children which lead to self-directed growth. They must appreciate that learners need to know today and for the future, the following:-

- (i) Their dependence and interdependence with all the people of the world
- (ii) The allocation of the world's resources
- (iii) The uneven distribution of wealth and its relation with war and peace
- (iv) The meaning of human and civil rights
- (v) The importance of achieving and maintaining a livable environment

- (vi) The ability to develop positive relations with people irrespective of religion & caste etc
- (vii) The ability to maintain good physical health.

The school courses need not be altered totally but the above information may be given through projects, films, discussions, lectures, exhibitions etc. The Principal should interact continuously with teachers, parents and even learners so as to outline the framework for such learning experience, short general awareness courses in population education, environmental education, and futurological issues may also be introduced mainly through the process of practical value clarifications by learners. The major thrust of such courses will not be on scores in tests but on behavioural changes among learners. e.g. a course in futurology would be considered successful if the learners used electricity sparingly in view of its expected acute shortage in the future. Because at least in a limited sense human beings create the future by decisions they reach and the policies they pursue, the idea of alternative futures and how to choose among them to serve the world good, should be a component of general education.

(5) The Introduction of Various Methods of Teaching:-

The Principal should motivate teachers to resort less to the chalk and talk method and to teach some portions of the content through different methods like programmed learning, experimental method, project method, group discussion etc. This will give the teacher ample time to solve the difficulties of individual learners.

(6) Organising child-centred accountability programmes:-

To ensure that the practice of child-centred education is yielding its dividends, the Principal should apply the modern managerial techniques while organizing various accountability programmes. Such programmes should be data based, objective and realistic. No attempt should be made to gloss over results. A few accountability programmes are suggested below:-

- (a) Flexible ability-grouping in academic subjects.
- (b) Statistical and graphical records of academic and other performance of individual students and the group at large.
- (c) Placement Evaluation i.e. a record of the mental readiness, academic performance of learners at the time of admission to a class.

- (d) Summative evaluation i.e. end of year evaluation of academic and other achievements.
- (e) A record of significant innovations by learners.
- (f) Special attention to study habits.
- (g) Staff meetings be used as opportunities for self introspection, for further improvement. Failure of learners caused thereof and remedies etc. may be discussed in staff meeting without fear of punitive measures.
- (h) There should be a regular programme of diagnostic testing, followed by remedial instructions, and records be maintained thereof.
- (i) The Principal and teachers should be vigilant and evaluate how far the institutional and instructional objectives are achieved.
- (j) The curricular and co-curricular activities should also be evaluated for quality.
- (k) Learners should be given freedom to discuss through regular group meetings their difficulties in academics, or otherwise periodic meetings with parents should be organized wherein a scientific data-based account of the school progress may be given. Criticisms and suggestions should be taken seriously.

(7) The Principal will need data upon which to base discussions and directions. Much of the data is currently available. Some will have to be generated by research studies. A few titles for research are suggested below:-

- (a) Teachers and class size
- (b) Does parent involvement make a difference in performance
- (c) Peer tutoring and academic achievement
- (d) Reaction of teachers and learners to instructional objectives
- (e) Staff development strategies
- (f) Class dynamics
- (g) Study habits

Along with teachers, learners may also be involved in research e.g. in a research of class room interaction, learners may be consulted about their perception of what goes on in the class room.

(8) Guidance Services:-

Guidance services should be organized to cater to the educational, vocational, personal needs of learners. Where such programmes cannot be organized due to financial constraints, the teachers may be motivated to take up a few such responsibilities e.g. one or two teachers may be urged to take up a course in guidance, conducted by the N.C.E.R.T.

(9). Teacher Preparation :-

To produce greater quality from the educational process, the Principal must be committed to staff development programmes that improve the quality of teaching and learning. He should motivate them to attend seminars, workshops, and conferences, especially in methodology, evaluation, statistical compilation, research methods, dance, drama, painting etc. They may especially be motivated to be creative and innovative. Teachers must have freedom and time to select, develop instructional material, and explore all possible methods of encouraging the individual. The teachers role, though comparatively non interfering, will not be passive and totally persuasive.

(10) Well organized co-curricular activities:-

Besides the traditional cultural activities a few classes can be set up in school in order to give free play to the learners' thoughts and views. Clubs like population education club, environment education club, photography club, Alchemy club etc may be set up. These should be run independently by children, but a careful record should be maintained.

These are a few suggestions regarding administrative issues in connection with child-centredness in education. In order to achieve the goal of providing child-centred education, the Principal should emerge as the champion of

children-alive and sensitive to their needs, sympathetic to their problems and respectful towards them as individuals. He should be able to provide an open and free environment in which mature personalities may develop. However, he should have no illusions. The experiment is not innovation. There will be no sudden metamorphosis in the educational system. Many learners will remain uncreative and non-performing inspite of the best efforts; many teachers will remain unmotivated and indifferent; many plans will fail and many obstacles will leave him discouraged. But many more children will grow and reap the benefits. It is a challenge of causing things to happen. It is leadership. The challenge will have to be taken up with determination & optimism.

REFERENCES

- (1) Aries, (1962), Centuries of childhood; A Social History of Family life. York Knopp.
- (2) Blond, Encyclopedia of Educational Research.
- (3) Boulding, E., (1979) Childrens Rights and the Wheel of Life, New Brunswick N.J. Transaction.
- (4) Jencks C & D Riesman (1972) The Academic Revolution. A.H. Wheeler & Co. VT. Ltd.,
- (5) Silberman C.E., (1971), Crises in the Class room, Vintage Books. N.Y.
- (6) Shane H.G. (1980). Global Development and Educational Consequences. Prentice Hall N.Y.
- (7) Wolman Dictionary of Behavioural Sciences.

TITLE OF PAPER: CHILD CENTRED EDUCATION- IN THE CONTEXT
OF UNIVERSIAL. SATION OF PRIMARY EDUCATION

A.B.L.Srivastava*

1. Introduction

There can hardly be any two opinions about making education child centred particularly at the primary stage. The National Policy on Education - 1986 has rightly emphasised the child centred approach by stating that "a warm; welcoming and encouraging approach; in which all concerned share a solicitude for the needs of the child; is the best motivation for the child to attend school and learn". The child centred approach implies that the children should be given individual attention in the class; they should be allowed to progress according to their own pace; and should be helped by the teachers not only in cognitive learning through remedial instruction where necessary, but also in the all round development of their personality. Obviously to adopt this approach, it is important that the teachers have the necessary training and skills to

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provide individualised instruction to the students in the form of activity based learning; remedial or enriched teaching depending on their needs, and at the same time, the schools provide the requisite facilities and environment for implementing these instructional strategies.

In the ultimate analysis, the various elements which constitute the educational system such as schools; school buildings; textbooks, curricula, libraries, teachers, educational administrators, procedures of evaluation; promotion policies; have all just one purpose, that of facilitating the optimal growth and development of the students. As such education can only be child centred and not school centred or teacher centred. Thus all the inputs and efforts must be geared to achieving objective of providing primary education to the young children as effectively and efficiently as possible. The fact that our educational system has so far failed in providing child centred education is evident from the high drop out rates between grades I to V at the primary stage of education. The new education policy recognised this problem of children dropping out of schools. It has committed itself to "adoption of meticulously formulated strategy based on micro-planning to ensure children's retention of schools". It aims at ensuring that "all the children who attain the age of about 11 by

by 1990 will have had 5 years of schooling or its equivalent through the non-formal stream and by 1995 all children will be provided free and compulsory education up to 14 years of age". The Programme of Action based on NPE also focussed on retention and not just enrolment, when it fixed the target of 5 years of schooling to all the children. The child centred education has to play a significant role in increasing the retention rate in schools. What we need to examine is how well equipped our education system is for adoption of the child centred approach to education in the vast majority of primary schools of the country. In this paper, it is proposed to consider the facilities that exist in the primary schools and the strategies that can be developed for providing child centred education in the different types of schools.

2. Existing Facilities in Primary Schools

The data on facilities available in schools and on teachers and students have been collected in the different All India Educational Surveys conducted by NCERT. The latest is the Fifth All India Educational Survey which would provide the data for the year 1986, but at the time of writing this paper the results of the Survey were not available except for a few States. The Fourth All India Educational Survey, (1978) however provides information on enrolment, teachers;

school buildings and other facilities in schools which give an idea of how well equipped the schools are. Table 1 gives some important indicators in respect of physical facilities and the equipment in the primary schools. Comparison of the Fourth Survey data with that of the Fifth Survey for some of the States shows that there has been much improvement in the situation over the period 1978 to 1986.

In 1978 there was 4,74,636 primary schools in the country out of which 91% were in rural areas. Out of the total schools 7.7% had no classrooms, 38.8% had only one classroom and 24.0% had two classrooms. Again, 53.5% schools had no play-ground facility, 34.1% schools had no mats or furniture for the students and 39.7% schools had no blackboards. Only 40.5% schools had drinking water facility and 14.8% schools had urinal/lavatories for the students. The schools which had some games/sports materials accounted for only 15.4% of the total schools. Coming to the various incentive schemes to attract children to schools, we find that 41.5% schools provided mid-day meals to children and 37.6% schools had provision for free textbooks for them. The other incentives of free uniforms and attendance scholarship for girls were available in only 12 to 13% of the primary schools. In respect of teachers also the position was not very good. The overall pupil-teacher ratio was 41:1. In some States (e.g. Andhra Pradesh, Gujarat, Karnataka and Rajasthan)

TABLE 1 FACILITIES IN PRIMARY SCHOOLS ACCORDING TO FOURTH
ALL INDIA EDUCATIONAL SURVEY (1978)

Description	No. of schools	% of school
Total primary schools	474636	
Schools in rural areas	431602	90.9
Schools without classrooms	36439	7.7
Schools with 1 classroom	184182	38.8
Schools with 2 classrooms	113699	24.0
Schools with 25 enrolment	41092	8.7
Schools with 26 to 50 enrolment	112586	23.7
Schools with 51 to 100 enrolment	161944	34.1
Schools without playground facility	253713	53.5
Schools without mats & furniture for students	162008	34.1
Schools without blackboard	188541	39.7
Schools without games/sports materials	401437	84.6
Schools without drinking water facility	282400	59.5
Schools without urinals/lavatories	404339	85.2
Schools providing mid-day meals	196780	41.5
Schools providing free uniforms	58960	12.4
Schools providing free text books	178293	37.6
Schools providing attendance scholarship to girls	62438	13.2
Teachers at primary stage	1599182	
Trained teachers	1379688	86.3
'Middle pass' or below 'middle pass' teachers	419683	26.2
Matriculate teachers	814136	50.9
Total primary schools or sections	570010	
Single teacher primary schools or sections	181966	31.9

it was 50 or more. The recent statistics show that the pupil-teacher ratio has increased instead of decreasing in a number of States. Of the total schools 32% were single teacher schools in 1978. Of course, the number of small schools is fairly large specially in rural areas and most of the single teacher schools had low enrolment. According to the Fourth Survey, 8.7% primary schools had 25 or less students; 23.7% schools had 26 to 50 students and 34.1% schools had 51 to 100 students. However, among the 16 lakhs teachers teaching at the primary stage in 1976 only 13.7% were untrained. But in terms of academic qualifications the picture was not so rosy. About 26% teachers had 'middle pass' or lower qualifications and 51% teachers had education up to the secondary stage. Obviously the ill equipped primary schools take their toll. A large percentage of children fail in each class and repeat the grade and equally large percentage of students drop out of the school before completing the full 5-year cycle of primary education. These children often lapse into illiteracy when they grow up thus swelling the number of illiterates in the country. Although we do not have good data on wastage in education, it is estimated that only 40% children starting in class I reach class V. From a sample/^{study} conducted recently in NCERT the estimated repeater rates were found to be between 15 and 20 percent

in classes I to V and the drop-out rates between 40% and 76% from classes I to V; in the States of Bihar; Madhya Pradesh; Uttar Pradesh; Andhra Pradesh, and Orissa. (see Table 2) This high wastage rate erodes the gains from huge sums of money spent on primary education. Only 25 to 30 per cent of the money can be considered as fruitfully utilised in view of the low output from the system.

3. Proposed Improvement in the Infra-structure

The Operation Blackboard Programme recently launched by the Government of India attempts to improve the infra-structure in schools. Under this programme it is proposed to provide at least two reasonably large rooms along with separate toilet facilities for boys and girls and at least two teachers in all the primary schools. It is also proposed to provide certain essential teaching and learning materials such as blackboards, maps, charts, a small library, toys and games and some equipment for work experience in all the schools. With implementation of the Operation Blackboard, the infra-structure for primary education is likely to improve considerably in the next few years. The Government is also going to establish Institutes of Education and Training in every district in order to upgrade the quality of teachers through pre-service and in-service training programmes. No doubt with all these inputs the primary schools will provide much more favourable environment for making education child centred. Nevertheless the fact remains that the physical facilities, equipment and quality of teachers are by and large poor in the majority of the primary schools and the situations will not change overnight. It will, therefore, be reasonable and realistic to develop different types of

strategies for adoption of child centred approach to education for the different types of schools. The yawning gap which at present exists between the reality of poor quality teaching learning that takes place in the majority of the primary schools today and the ideal teaching learning process which would ensure optimal growth and development of the child, can be bridged only slowly with proper planning.

4. Desired Characteristics of Child Centred Education at the Primary Stage

The child centred education at the primary stage requires that teachers know and understand the needs and growth potential of each child and adapt their classroom instruction to his/her needs. They should be able to monitor the development of child in both scholastic and non-scholastic areas through observation, tests and other tools of measurement. They should know about the difficulties in learning of the individual children through diagnostic testing and provide remedial teaching as and when required. For the gifted students, who learn faster than others and show better verbal or numerical ability, the teacher should be able to provide enriched instructional programme for the development of their abilities. In short, the teachers should be able to give attention to the individual student's needs and problems and help him in learning at his own pace. Similarly the

teacher should be able to identify the strengths and weaknesses of the child in other areas, such as sports and games, music, art, other extra-curricular activities and encourage them to develop their talent and skills in the areas in which they show promise. The teacher should know about interests, attitudes, physical fitness, personality traits, social behaviour etc. of each child in order to be able to help him in overcoming his weaknesses and reinforcing his positive characteristics. The teacher should also know about the home background of the child, for often the factors that inhibit his growth or learning are associated with the home environment. In brief teacher should have full information for each child on the numerous variables related to his growth and performance in school, both in scholastic and non-scholastic areas, his health, personality interests, attitudes, etc. as well as the home environment, and should be able to use this information effectively for his optimum development. Educationists, psychologists and other social scientists through research and studies have made valuable contribution to the understanding of the child's personality and his needs and potential for growth; they have provided valuable tools of measurement for various purposes and have also evolved strategies and methods for remedial teaching and catering to the needs of the gifted.

There are techniques of evaluation which teachers are supposed to use for more effective teaching. The National Policy on Education has emphasised the need for continuous comprehensive evaluation of students for improvement of the teaching learning process. It is all a part of the strategy of making education child centred.

At present the schools and teachers lack much of what is required for proper implementation of child centred educational programmes. The Programme of Action based on NPE has also recognised this shortcoming; when it stated "By making elementary education child-centred, we would be introducing a long awaited reform in the system. The most important aspect of this reform will be to make education joyful, inventive and satisfying learning activity, rather than a system of rote, cheerless; authoritarian instruction".

Of course, the teachers must be equipped with the knowledge and skills required for using the various tools and techniques needed for bringing about this reform in education. And the schools should also be provided the facilities, equipment and materials that the teachers would need to use.

5. Quantitative Dimensions of the Problem

Before talking of the strategies to be adopted for making education at the primary stage child centred, let us look at some recent statistics to get an idea of the magnitude of the problem. Considering the requirements of good child centred education, and the number of students to be dealt with, the problem certainly assumes mind **boggling dimensions**. In 1986-87, there were 900 lakh students enrolled at the primary stage of education. Of these 654 lakh students were enrolled in 5.37 lakh primary schools and the rest in the primary classes of Upper Primary or Secondary/Higher Secondary schools. The pupil-teacher ratio in the primary schools was 42:1 in 1986-87. In Uttar Pradesh, Bihar, Rajasthan and Andhra Pradesh this ratio was much higher (48,49,45 and 56 respectively). When the pupil-teacher ratio is so high, there must be good many schools in which the pupils per teacher would be well over 50. One can easily imagine how crowded the classroom would be^{and}/how difficult it would be to teach with just one teacher responsible for over 50 students in a class. On the other hand, there must be quite a few small schools; mostly in rural areas; where the pupil-teacher ratio would be quite low. These schools **are** likely to be very poorly equipped without adequate classrooms and other facilities. We have;

therefore, to think of not one strategy but a number of strategies which will be appropriate for the schools belonging to different categories in terms of pupil-teacher ratio and other facilities. Also priority will have to be fixed in terms of what can be achieved with any given infrastructure and not what is the ideal that should be achieved with the best of the facilities.

6. Priorities and Strategies for Child-Centred Education

The highest priority, of course, has to be given to adoption of those measures which help in achieving universalisation of primary education which means that the children should get at least 5 years of primary education before leaving the school. Obviously the child-centred education should have this as its main objective. The next in the order of priority may be the objectives of developing individual talents, helping the brilliant children to show still better performance and ensuring that all round development of their personalities takes place.

It is important for the educational planners and administrators to take note of the diversities that exist in the quality of schools; qualification of teachers, pupil-teacher ratio and availability of equipment such as psychological and educational tests; instructional materials;

equipment and materials for various games, sports, music, art, etc., which are crucial for effective child centred education. To start with, they should classify the schools into different categories on the basis of the availability of these facilities. Next, for each category of schools a suitable strategy will have to be developed after fixing the goal in respect of child centred education which can be achieved easily.

It is assumed that the different types of schools have different potential for adoption of child centred approach to education. Schools with minimum of facilities and low pupil-teacher ratio would be abundant in remote, hilly or desert regions as well as in some rural areas. In these schools a well-trained, innovative teacher can do a lot to provide individualised instruction and improve the students' performance even without much equipment. Because of the low pupil-teacher ratio he would know the students well individually and not require sophisticated tests to assess their abilities, interests, etc. In large schools with high pupil-teacher ratio the teachers will have to depend more on psychological and educational tests to assess the students' performance or potential. In well-equipped schools teachers can easily look after the children's overall development and not just confine themselves to their scholastic performance. It is thus

necessary to define the objective and scope of child centred education which are feasible for the schools of different categories ranging from the worst equipped to the best equipped. In one case the objective could be simply to optimise the learning; so that the students complete 5 years of primary education without dropping out; in another case the objective could be to provide adequate facilities for development of individual talents; enriched programmes of instruction to the gifted and to achieve overall development of each child's personality.

Targets can be fixed for the minimum facilities that must be provided in each school in order to make a minimum programme of child centred education feasible. The minimum programme; of course; should help in retaining the potential drop-outs in the school till they complete the primary education. The Operation Blackboard aims at providing certain minimum facilities in primary schools not only for academic growth but also for the students' development in non-scholastic areas. A programme of child-centred education could be developed that is suitable for schools covered under the Operation Blackboard. Similarly programmes could be developed to match the facilities in other better equipped schools. In general in all ill equipped schools the teachers may have to concentrate only on cognitive abilities

the traditional three R'S - (reading, writing and arithmetic) rather than all round development of child's personality, while in the better equipped schools they could make the child centred education more broad based and extended in scope.

Strategies may be developed and spelled out in detail in terms of 'dos' and 'dents' for teachers of different types of schools. The work on development of suitable packages for teachers should be taken up in all earnestness by teams of educationists and psychologists. It may be necessary to undertake research and survey programmes to study the existing conditions in schools at micro level in order to develop guidelines and packages of materials (e.g. tests, instructional materials for enabling students to proceed at their own pace and materials for enriched instruction to the talented students). This should be done not through isolated efforts by individuals here and there; but through a well coordinated programme of action that defines the tasks clearly, fixes the targets and initiates action to achieve the targets within specified time frame. To start with a conceptual framework is required for planning various activities. The following are some of the major stages in this exercise :

- (i) Definition of the different categories of schools according to the facilities and equipment they have, pupil-teacher ratio, rural/urban setting, etc.
- (ii) Estimation of the number of schools in each category
- (iii) Specification of the scope of child-centred education for each category of school.
- (iv) Identification of the materials to be developed in each case.
- (v) Development of the materials.
- (vi) Preparation of guidelines for teachers for each case.
- (vii) Distribution of materials and training of teachers.
- (viii) Implementation of the programme in a phased manner
- (ix) Monitoring and evaluation in terms of pupil's achievement; retention rate in schools; participation of students in games and other extra-curricular activities, etc.

The schools can be categorised in a number of ways. One of the ways in which they could be categorised is as follows:

Categories of Schools

<u>Facilities, equipment</u>	<u>Pupil-teacher ratio</u>		
	<u>low(<25)</u>	<u>Average(25-40)</u>	<u>High(>40)</u>
(a) Ill-equipped (poor building without proper furniture; absence of basic teaching materials, etc.)	A ₁	A ₂	A ₃
(b) Moderately-equipped (average building and furniture; moderate facilities for games sports, etc. just fulfilling the requirements of Operation Blackboard)	B ₁	B ₂	B ₃
(c) Well-equipped (good building, good furniture; playground & games/sports/facilities; equipped with facilities of testing, etc.)	C ₁	C ₂	C ₃

An example of how the different levels of objectives and scope of Child-Centred Education could be defined for the different types of schools is shown below:

Level

- | | |
|---|---|
| A | Identifying the weak children and helping them in achieving better scholastic performance through individual guidance; solving individual personality and home related problems with a view to remove obstacles in learning; based on personal observations rather than use of tests. |
| B | Identifying children's weaknesses and strengths through proper testing of entry level behaviour in cognitive domain; helping weak children to overcome their difficulties and good students to achieve still better results using diagnostic testing and teaching. |

- C Testing, entry level and terminal behaviour in cognitive and affective domains; use of comprehensive evaluation methods throughout schooling for more effective teaching and learning; providing opportunities for development of individual talents in sports, games and other areas.

The problems that need to be solved in implementing the above schemes may be summarised as follows :-

- (i) How to train so many teachers for introducing child-centred education ?
- (ii) How to provide them motivation?
- (iii) How to provide the required facilities, materials and congenial environment in schools for enabling teachers to adopt child centred approach to education?
- (iv) How to plan and organise the entire programme for gradual switch over to child centred approach?
- (v) How to monitor and evaluate the programme?

It may be necessary for a cell or working group to look into the above problems and provide solutions that are feasible to implement. A half hearted approach will not bring about any perceptible change in the system, and the problem of dull, drab and uninteresting teaching in schools will continue to take its toll in the form of low retention and high wastage at the primary stage. As it is a long awaited reform, the efforts should be made with all seriousness and determination otherwise very little will be achieved in view of the enormous number of schools to be covered, most of which are poorly equipped in terms of teachers and other essential facilities.

TITLE OF PAPER : TEACHER EDUCATION FOR CHILD CENTRED
EDUCATION

* S.P.Anand*

Education

In popular parlance, education is considered to be the twin process of teaching and learning. For teaching teachers are made accountable and for learning learners are held responsible. However, from all accounts, for an effective system of education, it needs to be established as a process meant to facilitate an effective learning on the part of learners.

Teaching is defined as the organisation of learning. Learning is known as the modification of concepts and perceptions, attitudes and values, habits and temperaments. As such, education revolves around the learner to guide him to make, mould and build up his desirable personality structure.

Child by his very nature is considered to be the best learner in the process of teaching. He is found to be in the most appropriate age group of people to initiate and augment the development of his personality. Teacher as the organiser of learning accepts the child as the very right human being fit for his teaching.

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Education is inherently a child centred process. Ideally, a progressive, dynamic and a pragmatic society always builds up a child centred system of education. And a child centred approach is always thought to be most suitable approach to conduct the process of education to its logical ends.

Prevailing system - An authority centred structure

The prevailing system of education is neither teacher centred nor a child centred one. It can best be known as an authority centred structure of education. It is an imposed system of education both upon the organisers of learning (teachers) as well as on the learners (children) themselves.

However, the child and teacher remain to be considered as the main pillars of education but none of them is taken into confidence so as to decide upon the mechanism of the process of education. A teacher and student are more or less made to run the process of education as they may be directed to do so by some authority from above.

Teacher finds himself nowhere to determine what he should do and how he should do what he is told to do. He is left with no other choice but to follow the set scheme of things in education like a disciplined soldier in the army. He is not very much wanted for the formulation of even the courses of studies which he is expected to

take up in the classrooms with his students. He has no meaningful association with educational policy making body sitting at the helm of affairs in the edifice of education. A teacher is expected to follow the instructions issued from his directorate of education. He is virtually debarred from using his own initiative and insight to do his job to the best of his personal satisfaction and social contribution. Such salient features of the present system of education do not allow us to know it or caption it as teacher centred education.

The child, a junior partner in the process of education, is hardly consulted or even asked what he wants to learn or what he thinks he cannot learn and what is that which he can learn all the best. His abilities, aptitudes and interests are perhaps relegated to the position of no significant importance in the determination of aims and objectives of his education. Individual differences are totally sacrificed at the altar of homogeneous pattern of education in practice. Each child is expected to carry on with the same contents of learning and activities in education. Such realities dominating the system of education in no way by any stretch of justification or rationalisation entitle it as much wanted child centred education.

In this prevailing system of education whatsoever happens, it is determined by an authority in its own right. The authority may be vested in Govt. or delegated to the departments of education or with somebody else but teachers and taughts are the least authorised individuals to set the scheme of things in education. Teacher organised teaching as he is ordained from above. The student is but to enable himself to act as obedient student to learn what he is made to learn by approved methods of teaching. This all accounts for rendering present system of education as an authority centred education.

Need for Child Centred Education

Because of its not being child centred education, the system has fallen short of its expectations in its results. It has failed to deliver the kind of manpower to the society for which it has been specifically structured. The education of the day, cannot claim to supply from its schools and institutions of learning, children as responsible citizens, keen learners, sincere workers and fine persons.

Persons of bundles of information are allright, but even such persons lacking in personal and social awareness can hardly be relied upon to sustain and retain the cultural inheritance of the society. Actually men of character and calibre combined together are needed to be the output of the process of education. To enable budding citizens to

keep the tempo of progress and prosperity in accelerated momentum, the educated children must be imbued with missionary spirit and enthusiasm to serve the mankind as such.

In the process of education, the focus should always remain the child. In all, education should be kept readily available to the child. Education should be for the child and child should never be left at the disposal of education. The child should never be made to fit into a particular system of education. The system itself should prepare itself befitting to the educational requirements of children.

Child centred education draws its sustenance from the needs, aspirations, abilities and aptitudes of children. This system runs on the perfect understanding set up amongst teachers and taughts. They make a joint effort to realise the enshrined objectives of education in close cooperation with each other. In this system, teachers conduct themselves as the accepted and honoured facilitators and guardians of learning of children.

For the benefit of the child, for the sake of society and in the interest of education itself, the system has to be visualised as child centred education. All the more, this much wanted structured child centred education necessarily needs to be processed and practised as child centred approach in education.

TEACHER EDUCATION

Teacher education is recognised as the fundamental seat of importance in a system of education. This has to be acknowledged forthwith to do some useful thinking on education. This style of thinking can lead us to do the needful in education.

No new thinking or reform in education in its any form may be visualised as having been truly introduced in education if it does not penetrate into the system through the proper channels of teacher education. This hard fact of the system may be kept in mind to allow child centred education find its firm footing in our educational thoughts and practices. Teacher education should not be allowed to become a stumbling block but must be utilised as an agency of acceleration in implementing our strategies on child centred approach in education.

All the more, teacher educators, the messengers of teacher education, should establish themselves as the true custodians of education including thereby the child centred education. From their indepth research and innovations, teacher educators should find themselves in the forefronts of the movement of child centred education in the country. The nation should, with confidence and faith in teacher educators call upon and rely upon them to establish and conduct child centred approach in our system of education.

Plan of Action

Curriculum

In its plan of action to change over from authority centred education to child centred education, we have to make teacher educators and teachers in schools as the sole spokesman at all platforms of debates and discussions on child centred curriculum.

Teachers' involvement in framing the curriculum, should not be left merely as a matter of formality or convenience. Their participation has to be made constructive to give a real shape to the curriculum which should be known as child centred curriculum. Teachers' suggestions springing out from their practical experiences for working with children should be duly incorporated in the ultimate designs of curriculum for students. This may be ensured as the first concrete line of action to let child centred education find its place in the grassroots of our system of education.

Under the auspices of teacher education, child psychologists and counsellors should sit together with teachers and teacher educators. They should evolve a curriculum which must satisfy the salient features of child centred activity based education. The curriculum should satisfy the needs and aspirations of children. It should be based upon the interests, aptitudes and

abilities of children. However, it should remain challenging to the creative potentialities of learners. Teachers and taughts should find sufficient scope to exercise and apply their initiatives and freedom to implement such curriculum.

Teacher education has to widen and broaden its area of responsibility to provide its expertise to arrive at child centred curriculum - the curriculum which should prove itself as the pace setter of child centred approach in our system of education.

Teacher training

To give up authority centred education in letter and spirits and to embark upon child centred education in the real sense of the word, it is to bring about a revolution in education. It may be viewed as the beginning of an era of renaissance in education.

In child centred education, the process of education emanates from children only to conclude its finale in children themselves. Such a system revolves around children. Teacher is viewed as the real master of the situation to facilitate children to learn through activity based curriculum.

The quality of education cannot be better than its teachers and teachers' quality is reflected from the quality of teacher education itself. To usher in an era of

child centred education, we have to look forward to the temples of teacher education to prepare and make available competent and effective teachers for the purpose. A continuous flow of 'masters' of the situation in child centred approach in education has to be assured by the programme of teacher education.

Teacher education in its true perspectives should ultimately be made responsible to create a culture of child centred education in our country. For this momentous task, teacher education in itself needs to be thoroughly examined. It needs to be rejuvenated and made enthusiastic of being accountable to do the needful expected from the programme of teacher education. Men and material, thoughts and actions constituting the pattern of teacher education should be given a face lift treatment to cater to the demands of child centred approach in education. It will be 'well begun is half done' if we could reshape and redesign our system of teacher education as the starting point for the introduction of child centred approach in our pattern of education.

Teacher educators

To train and educate teacher trainees as the practitioners of child centred education, teacher educators themselves are necessarily required to be the men of faith and conviction in the system. In theory and practice,

they should be able to deliver the message of child centred education to the pupil teachers. In their styles of taking theory classes, child centred approach should find its justification for practice in schools. In practical classes, teacher educators should demonstrate child centred approach in action in simulated as well as real school classroom situations.

Teacher educators may also be drawn from schools where they should have established themselves as good teachers, meritorious teachers who should be able to transmit the real mission of teaching children to the new generation of teachers. On the other hand, teacher educators selected directly should be kept on probation period till they earn a practical experience of teaching children in schools through child centred approach.

For their effectiveness in the education of teacher-trainees to practise child centred approach in schools, teacher educators should always be kept reminded of 'example is better than precept'.

Teacher trainees

Once we have teacher educators who are able to instill the spirit of child centred approach amongst the teacher trainees, the trainees should be found in readiness to listen to this approach. It is always better to have motivated persons to listen to something which is thought to be

essential to be conveyed to them. The message of teacher educators should not go unheard in wilderness, it must be received by pupil teachers in full attention and with a sincerity of purpose. To ensure such motivated teacher trainees in teacher training institutions, their recruitment procedure needs to be carefully arrived at.

In the scheme of selection of pupil teachers in the schools and colleges of education, we are required to keep a balanced view of the personal-personality aspect as well as academic record of aspirant trainees. Academically good persons found to be fit for admission to teacher training programme, need essentially be ensured for their healthy attitude towards children, favourable attitude towards teaching profession and for a good aptitude for teaching children in schools.

Child centred approach in education can only be practised with dedication and commitment with the teaching profession. Integrated, self-composed, confident and men of patience and firm determination to mould the character and personality of children, can be relied upon to listen to the message of child centred approach in education. For this one, we may do good to recruit mentally healthy individuals as pupil teachers in the teacher education programme.

Having been convinced about it, an appropriate testing and non-testing procedure can be developed to allow teacher education only to the persons of childlike personality, fascinating character and brilliant academic qualifications.

In-service teacher education

Once received teacher education should never be thought as complete and perfect for all times to come. By nature, teacher education is a continuous process. Once trained teachers need to undertake refresher courses from time to time to keep their professional efficiency and morale high. Practising teachers in schools should be given facilities and opportunities to attend the inservice teacher education programmes as a matter of essential professional obligation on them.

For practising teachers, in-service teacher education programmes on child centred approach has become the need of the hour. Perhaps, mass orientation teacher training programmes has set the ball rolling in its right direction. The programmes need to be made more effective and useful on the basis of feedback received therein.

Short term projects of action research on children can be visualised as joint projects between teachers in schools and teacher educators in teacher training

institutions. This will help to bring teacher education and school education close to each other. The interaction between teachers and teacher educators may go a long way to think about practical strategies on child centred approach in education. School teachers are well placed to provide feedback to the teacher educators on the working of child centred approach in schools. Teacher educators visiting schools and school teachers being given warm reception in teacher education institutions in itself is a strategy to introduce child centred approach in schools.

Contents of teacher education

Child centred approach rests upon a thorough understanding of children on the part of their teachers. Teacher education should provide the best of working knowledge to understand each and every child to each and every teacher teaching in schools.

The concept of inter-intra individual differences has to be brought home to the pupil teachers. The contours of mental, social, physical and emotional development of children must be well explained to the pupil teachers. Exceptional children have exceptional needs and they need be enabled to learn by teachers by their well designed child centred approach in teaching. Enriched curriculum over and above the general prescribed courses of studies has to

be kept in readiness to facilitate gifted children have the development of their exceptional talents. In a group situation in schools in classroom structures teachers have to reach each and every child to teach him, educate him and help him to make the best of his time in school. Teachers must design teaching for children and children may not be designed for teaching but they need be properly motivated for learning. Teacher trainees in their pre-service teacher education programme must receive all essential training to teach each and every child, reach one and all children to give them the benefit of coming to the school.

In teacher training, the teacher must be given an understanding about his own being effective or going to be an ineffective teacher. He must be enlightened about teaching through various methods keeping child centred approach intact. He can follow experimental method, lecture method, as may be suitable to the situation but he must take care of the 'child' involved in the process of his teaching. The child must learn, enhance his learning; should be kept in mind by the teacher. The courses of studies have to be finished but they should be meaningfully completed by all children to their satisfaction. The concept of 'Mastery Learning' has a special message for teachers in this context. Children learn and their learning is regulated by their rate of learning which has to be

accepted. Each and every child has to be facilitated to learn to give him the satisfaction of achievement to help him build up a sound mental health.

In brief

Education by nature is a child centred system. For its effectiveness it must be conducted through child centred activity approach. This has been very well reminded to one and all of us by NPE, 1986.

The programme of teacher education needs to be recast to meet with the demands of introducing child centred approach in education. Teachers have to be oriented and fresh teacher trainees have to be recruited who may respond well to practise this approach in schools.

Institutions of teacher education should take up the responsibility of developing a culture of child centred approach in schools established on the system of child centred education. Teacher educators should give a serious thought to it. They should accept this challenging opportunity with a firm determination and fortitude at their command. The society needs to be assured that teacher educators will come up to its expectations.

TITLE OF PAPER : PREPARING CHILDREN FOR FUTURE
CITIZENRY

Anima Sen*

After the World War II, human talent has been increasingly recognised to be worth cherishing as a resource. Wise investment for the development of this human resource is expected to lead to an all round development of a nation. One of the most important resources of any community is its children. Children are the citizens of tomorrow who would substantially contribute to the social, economic, and all-round development of the country. John Dewey once remarked, "What the best and wisest parent wants for his child, that must be the community want for its children."

The key word for such development is education; it is the mirror through which the cultural heritage of a nation is reflected. The process of education manifests itself through its ability to produce more and more quality citizenry for future generations. Achievement through education should ensure production of quality human beings, more knowledgeable, more pragmatic, more sensible, more sensitive, more amenable and more concerned to the relevant needs of the society.

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Education must generate the needed trained and skilled men power. Education does not limit itself to only academic achievement or mere text book learning; rather it is more concerned with the all round development of an individual. The insight and applications of Psychological principles have significant relevance to the process of life long education, as is evident from the educational objectives and activities related to each stage of human development.

India has a great mandate to enhance the ^{quality} of its educated people -- from the pre-independence period, the literacy rate has increased from 24% to 36% in 1981. In India, children upto the age of 14 constitute about one-third of the total population; 50% of which are the children below five years of age.

The literacy rate has improved steadily since Independence. But the gap between the sexes, has, however, persisted (see the following table).

	M.	F.	TOTAL
1951	24.9	7.9	16.6
1961	31.4	12.9	24.0
1971	39.5	18.4	29.5
1981	46.4	24.9	36.0

The scene appears quite gloomy because of the fact that the enormous growth in population tends to neutralise the apparent improvement. Though the enrolment rates are increasing, the drop out rates are also depressingly high. In India 40 percent of children entering Class I either repeat the class or leave the school. One report (Satya Bhusan, 1986) states that for every three enrolments (for whatever reasons) two drop-outs and such drop outs swell the adult illiterate population. It has been rightly argued in the report that literacy can only be fought as part of a co-ordinated policy against poverty.

The question of quality is implicitly related with quantity. Development of these children into healthy normal individuals as future citizens cannot readily be effected when the statistics indicate that 44% of total deaths are from population of children under 14 years of age. Similarly, millions of children in India are destitutes and orphans. They constitute 5.56 percent of the total child population in 1981; and one estimation has indicated that by 1991, 12.32 million children will be destitute and orphans (Pathak and Saxena, 1980). Such children are usually unwanted or lost children; and for a variety of reasons they are placed in institutions.

Children vary in their endowment, in their opportunities and also in the speed and direction of their growth. Underlying these differences are factors that seem to be universally

working in human development. This in essence, requires an understanding of the type of society we want to live in and which of the practices and cultural values of the people we cherish, and hence we want to preserve and again which one deserves a change e.g. traditional lower status of women, untouchability, dowry system among many other social evils deserve a change for the betterment of mankind. It is a fact that the children of today would be parents of tomorrow. Education as a tool of cultural and social change has a definite role to play in this direction in reducing the undesirable aspects of culture on human behaviour and to bring a desirable change in the society.

Some of the relevant factors in relation to the physical, social and psychological development of the child are considered here.

MALNUTRITION

Over the last several decades, considerable effort has been directed toward developing an understanding of the biological effects of specific and general forms of malnutrition on human neurological and psychological development.

Malnutrition during infancy and early childhood is believed to have long term repercussions on both physical growth and intellectual performance in later life. A substantial evidence has accumulated over the years to unequivocally demonstrate that severe under-nutrition in early life adversely

affects brain development. Studies carried out on experimental animals under controlled conditions have shown that even moderate malnutrition imposed at a time when the central nervous system is developing, if persistent enough, interferes with neuronal division, adversely affecting myelination, impairing learning ability, and also leading to abnormal behaviour. Malnutrition during early childhood has been found to be associated with smaller head circumference, lower brain weights and altered biochemistry of the brain; through the functional significance of these neurochemical alterations is, as yet, far from clearly understood. Malnourished children have been found to perform poorly in intelligence tests and on this basis it has been held that protein-calorie inadequacy during childhood can lead to irreversible impairment of mental function in later life.

Behavioural consequences of malnutrition in human populations are manifold. Malnutrition affects human behaviour directly by disturbing brain growth and function, and indirectly by influencing the social and institutional responses due to this perturbation. It is a well established fact that children in general coming from lower socio-economic strata tend to perform less well on tests of intellectual development and show poorer scholastic achievement than children from middle class homes. These class differences in intellectual and language functioning do not appear consistently until around 2 or 3 years of age, and they seem to become progressively apparent as children get older and enter ^{the} school system at 5-6 years of age.

Middle class children have advantage, since the analytical cognitive style helps much in scholastic achievement, whereas children from lower social-economic strata find adjustment difficulties and may lead to feel inferior and other feelings of inadequacy. The pervasiveness of socio-environmental influences of children's early psychological development is particularly well demonstrated in finding from several studies conducted world over (Sen, 1984).

The impact of total milieu surrounding malnutrition is also an important area. Chronically, under-nourished children showed deficiencies in intersensory integration. Unbalanced diets, unhygienically prepared food, lack of cleanliness, untidy surroundings, lack of timely medicare are some of the factors that led to recurrent infections, chronic diseases of liver, bronchial troubles, and blindness amongst others. Cumulative nutritional deprivation, like severe malnutrition may interfere with optimal development of cognitive functioning and may have severe implications for learning in later years.

A number of studies in India and in other parts of the world such as Mexico, Africa and the Caribbean have shown that chronically undernourished children tend to lag behind in terms of behavioural development. The primary deficits appear to involve motor integrative performance, reading ability, concentration and motivation. Apathy and reduced curiosity have also been associated with early malnutrition. The hazards of malnutrition and undernutrition are serious obstacles to the promotion of physical and mental health of children.

According to the Third World Food Survey of FAO, about half of the world's population suffers from malnutrition. In a country like India malnutrition is endemic, per capita calorie consumption is about 2100 which is below the recommended standard of 2400 for average male adult engaged in sedentary work. Malnutrition due to nutritional deprivation interferes with a child's motivation, power of concentration, and capacity to learn. Children who survive a severe and lengthy episode of malnutrition in early life are handicapped in learning some of the fundamental academic skills, and are therefore, less able to profit from the cumulative knowledge available. By inhibiting the development of a primary process essential for cognitive growth, malnutrition interferes with orderly development, experience and contributes to a sub-optimal level of intellectual functioning. The poorer the nutrition the more difficult it is for the child to learn and come up with the school life.

In India, the child population is about 225 millions, out of which nearly 100 million children are deprived or under privileged; and 65 million children are estimated to be malnourished : About 85 percent of pre-school children show some evidence of malnourishment (Tandon, 1984).

Malnutrition, infection and high mortality rate are some serious public health problems; two-thirds of the world population are mostly from the developing and under-developed countries.

The problem of undernourishment and malnutrition is acute in many areas and its consequences seriously affect physical growth, social and mental development. Inadequate diet leads to poor stamina and low physical activity-which in turn leads to low productivity and still to more poverty. There is a growing concern over the problem of hunger and malnutrition inspite of increasingly more application of high yielding cereals and better technology in agricultural development. The so-called green revolution cannot fulfil the human promise of providing a higher quality of life unless the farm families and the rural community are helped to understand and accept changes assential for development. Many of the rural people do not have the knowledge, skills or motivation to respond or to make an effective contribution to national development as they lack in human resource development.

Malnutrition may not always be due to deficiency of food. Nearly all researchers have agreed that malnutrition arises from a common group of adverse social conditions, including poverty, ignorance, poor hygiene, overcrowding, lack of education, parasitic and communicable diseases, superstition and other factors that collectively and individually limit the availability and or utilisation of nutrients by the organism. Malnutrition is not an isolated biological phenomenon, but it occurs as a part of an on-going social process which affects the physical and intellectual development of the child. Both social and nutritional factors affect mental development not only independently, but also

they interact very strongly. In rural India, where malnutrition is more common, a child may not achieve maximum genetic potential. It cannot be denied that correlates of poverty suggest poor nutrition, inadequate health care, lack of stimulation and a general impoverished environment which are indeed deleterious for the cognitive development. The major influence of malnutrition may be displayed in attention, motivations or arousal deficits rather than in basic intelligence and learning competence in children (Sen and Sen, 1983).

Continuing deprivation, particularly at crucial points of development would institute damage which may run even in the succeeding generations. The unstimulating social context might also have a reflection on malnourishment. There are instances where malnutrition might occur in addition to the factor of poverty or low socio-economic condition. For example, even when adequate protein is available in the child's diet, it may not be readily absorbed. Many malnourished children have infections and infestations interfering with the proper utilization and absorption of dietary protein. The cultural peculiarities of a community might encourage directly or indirectly incidence of malnutrition as also discourage in rehabilitation. Traditional food habits of the family or of a community such as habits of eating polished rice, or avoiding intake of animal proteins and frequent fasting on religious ground, personal habits and food fads also play important roles in the development of malnutrition. Mother's intellectual level or educational background are also some of the important factors in this respect.

Very often the pre-school child is neglected. The mother must remember that the pre-school child needs comparatively more food than an adult in relation to his weight. During these years, children grow very fast, so they need foods which build their bodies and make them strong. The child will show steady growth if he is in a state of good health. If children do not get sufficient amount of the right kinds of food, they fail to grow properly. These are the years when children suffer from usual childhood diseases (chickenpox, measles, etc.) and they need foods that build up resistance against disease and also rebuild their bodies after sickness.

The child must be taught good food habits (eating at regular times, washing hands before and after meals etc.). The eating habits he forms at this time will continue to stay with him for life. The nutritional needs of the pre-school children are much higher than those of adults. The diet of the child must be rich in protective food to ensure an adequate supply of nutrients for his needs.

The needs for proper education, recreation and mental and psychological growth and adequate nutrition are equally valid for the child at school. Several school children attend school after a scanty breakfast and are hungry during most of the school hours. The school is a common place where children can be reached collectively and easily. Feeding of nutritious supplementary foods, if done through the Mid-day Meal Programmes can be of immense value.

THE ROLE OF HOME--- PARENTS AND FAMILY

The complex process of personality development and character building undoubtedly starts first at home.

The general approach the parents adopt, attitudes that they hold, the style of socialization they exercise, encouragement and reinforcement that they provide - all constitute an important psychological environment for the child. Quality environment could not be created just by accumulation of toys, play materials and the modern amenities. The child without qualitative parental interaction, child to-child interaction and child's interaction with family members, can not grow to the optimal level of his potentialities. Children fail to learn to simulate any model behaviour, if parents present conflicting model in their day to day behaviour. Effective parent-child communication in dealing with children would involve a balance between love, freedom and variety of childhood play situations. This would help in the development of round self esteem and confidence. Many times parents lack realistic, positive and healthy attitude towards children. They do not understand the psychological need of the children. Techniques of answering children's questions emerging out of their curiosity to know the world, appreciating their feeling and helping them for clear ideas call for definite parental skills.

The causes of repertoire of emotional disturbances in children are never clear. However, a stable family relations, love, affection and real concern for the child and an understanding

of his problems pave a long way towards healthy growth. Stable, warm and harmonious family relationship is the ^{bulwark} of a child's mental health.

Over-~~protection~~ and indulgence nevertheless need to be avoided in order to avert undue dependency and aggression. The child, if overprotected, does not seem to be popular amongst his peers. Too much interference with the child's affairs also bring negativism in behaviour. Negativism has been defined as a form of behaviour in which the child shows resistance to adult authority . A sympathetic understanding of the child's requirements and problems, as well as setting of a compatible standard for him in relation to the potentialities of the child are some of the prerequisites for his proper development.

At home, the input of human interactions need to be enhanced. The parents and other members of the family should pay an affectionate understanding to the needs of the children. The process of urbanization has disrupted old bonds of traditional social structure and relation in joint family system and also among neighbourhood.

The process of urbanization has changed the family structure and values as enjoined by the average Indian Family, reinforcing the process of migrations from rural to urban areas. In spite of industrial development, it has affected the quality of life at family level. It has deteriorated the emotional bonds of relations between parents and children. It has made the home environment deprived of interaction among family members. The emotional

bond among members of the family has deteriorated; interaction among members of the extended family has minimised.

Family is more and more tuned to the materialistic aspects of life without trying to propagate any value system in the children. A kind of mechanical culture has replaced the real concern for the mental health of the child. Quality of life is invariably discussed in the form of more and more physical comfort of the family and accumulation of latest electronic household gadgetry. But poor class or community devoid of materialistic achievement, need not necessarily be poor in psychological environment. The psychological environment is identified in terms of fulfilment of psychological needs. It includes healthy inter-personal relationship, communication between family members and also between children, family value establishing the code of conduct in the child, and development of bonds between parents and the child. The child with the input of human interaction is liable to bring quality parent-child interaction; without interaction with the other family members, the children cannot grow to the optimal level of potentialities.

The personality of the child develops as a result of interaction between his biological needs and the various socio-psychological influences exerted on him by the members of his family.

Family life has certainly changed over the years. Industrialization-cum-urbanisation has brought in many a changes both in the structure and the function of a family. Nuclear families (whether desirable or not) are more frequently prevailing and the number of extended family is gradually receding. Functionally also, there has been a tremendous change. The wife or mother is no longer confined to her house to make it a home, she is also actively participating outside home in the economic activities, directly or indirectly. Rearing up of children is still one of the major functions of the family, but the style or pattern of child rearing practices has undergone significant changes. In spite of radical changes, parents still control or at least try to control the behaviour of their children all over the world.

The differences we see in the behaviour of individuals in different cultures and/or within the same culture are largely a product of the process called socialization. Family, being one of the fundamental social groups, is largely responsible in the early process of socialization. It really matters, what goes on inside the home, alongwith other factors. Socialization has a reference to the learning of accepted and approved ways of behaving. The infant is born in an already existing group, viz., the family, which has certain standardized modes of behaviour, accepted values, attitudes which are nothing but variations in social norms.

Every family has innumerable social norms related to many different aspects of life such as in matters of dress, food habit, language habit, relationship with different members of the family, relatives, neighbourhood, ideologies, attitude towards recreation among other things.

Emotional climate in the home is a very important factor; and in this context the significance of harmonious relationship between parents is readily understood. The child is naturally quick to perceive discord, in any, amongst the members of the family. In fact, the future stability of a family rests upon the affectional bond. And to reinforce this affectional bond in the inter-personal relationship, the role of recreation in the family life is also crucial. Folklores, mores, etc. are learned through recreation activities inside the family. The typical psychological value of effect of reward, reinforcement does a long way in influencing the child's behaviour, persuading him to leave a delinquent gang, exerting discipline etc., through recreational activities.

The family is to fulfil certain basic functions which have individual service as well as society-oriented aspects. In carrying out these functions, individuals in differentiated roles interact in core relationship. The nature of the influence of the members of the family resulting from these functions can explain some presumably consequent phenomena as personality development of the child. It can fulfil the function of providing all members with the emotional gratification derivable

from primary relationships and of providing the child with nurturance and control. Childhood is regarded as the period of life where maximum emphasis is put on socialization. The function of socialization of the child is largely vested upon the family. Different aspects of socialization, viz., acquisition of intellectual and motor skills, development of moral character, preparation for assuming adult roles and the development of personality-- all these are greatly influenced by inter-personal relationship in the family.

Development of co-operating attitude is an art; the trait of co-operation should always be encouraged for development. It is not desirable that the child should always be pushed for competition. Fiercely competitive climate should, as far as practicable, be averted for the child. Self-competition is good and in this process he often does better than others, without being unnecessarily uncooperative and hostile to others.

While guiding, shaping and handling children, physical punishments and self ^{degrading} verbal threats have to be avoided completely. Only through tender care and deep concern for the child, his personality can bloom and flourish.

A thorough analysis of home environment often helps in understanding the source of the child's problems. A judge once made a very wise observation, stating that, 'I have never met a criminal who came from a happy home'.

THE ROLE OF SCHOOL

As the days of early childhood come to an end, normally the child is expected to be ready for going to school. To all young children, going to school means growing up, and in fact they want to grow as big as 'daddy'. They look forward eagerly to the day when they will be grown-up enough to be known as school children. Children who have older siblings already in school, are especially eager to join 'the ranks of school children. The older brothers and sisters leave them behind every morning and come back with lots of day to day experiences which they discuss at home, the younger children hear them and want also to share their experiences.

Going to school may be an exciting adventure for the child or it might be a frightful business for him depending upon his nature of preparation for it. Hurlock (1970) observed that studies of children's attitudes toward school have indicated that though most children enter school with high hopes and great expectations, there are also many children who become disillusioned with school, very soon after entering there. It is a truism that stresses and threats generated by the social environment will have unfavourable effects on the psychological development of the children.

The school environment and community have also very significant roles; satisfying and stimulating experiences at school and in recreational activities with peer group become

conducive in generating a feeling of adequacy and/^asense of confidence and security. This in turn might sometimes offset substantially even for an adverse home situation.

Going to school is an adjustment for the child, since for most of them, this would amount to a real break from the home environment, first of its kind. This involves^a series of adjustments to new people, new surroundings and new behavioural patterns; and adjustment to new people or situations is invariably accompanied by a certain amount of emotional tension. The young child with limited experiences faces difficulty in any kind of new adjustment. This is amply exemplified by such incidents as having a visitor in the home or moving to another residence might easily upset the young child.

Though it is true that the ability to make adjustments to new situations depends partly upon intelligence, but the previous experiences in making such adjustments acquired by the child is also of considerable importance. However, it is worth mentioning that until the fundamental physiological, motor, and social habits are fully established, the child should be provided with a stable and unvaried environment as far as possible in order to help him in getting settled in his ways. When the young child faces difficulty in making new adjustments because of his lack of experience, the resulting emotional tension becomes very much pronounced. This pent-up emotion manifests itself in a variety of ways; such as, frequent outburst into crying, general

irritability, loss of appetite, vomiting, loss of weight, several forms of speech disorders, difficulty in sleep and the like.

The early experiences of the child in school become determinant of his feeling and attitude toward school. All his eagerness for going to school might disappear, if after entering the school he finds himself unprepared for what the school expects of him. The enjoyment and pleasure anticipated by the child might be overpowered by his newly developed fear and feeling of inadequacy.

Unpreparedness for the school thus affects the child's adjustment in school. On the other extreme, however, the child is sometimes prepared giving a wrong notion of the school, which is equally harmful for him. For instance, some parents endeavour to make their children liking school by presenting an enchanting, unrealistic and colourful picture of the school life, such as, there are plenty of kids to play around with him all the time, etc.

Undesirable early experiences at school might be developed either due to lack of preparation or preparation of the wrong type, and these might have serious consequences, since the whole attitude of the child toward school might be adversely affected because of unfavourable disposition. The child develops accumulated disgust for school; and he may even revolt resulting in protest against going to school. The present writer had the opportunity of observing a small boy who developed a hostile attitude towards school to such an extent that he started

refusing to go to bed at night, lest it would be morning again after the sleep is over, and he would again be sent to school: The parents were then compelled to take the boy out of the school, at least temporarily, in order to relieve him from the nightmare.

Some preliminary experience of the child in pre-school years might help him, however, in getting prepared for the school, and there are several ways in which a child can be given such preliminary experience in making adjustments. For instance, he may be sent to a nursery school or kindergarten for a year or two before he is ready to enter a formal school.

ROLE OF PRE-SCHOOL EXPERIENCE

The home training may not necessarily be always sufficient because of various reasons. The parents, particularly the mother may not have sufficient time to look after all those various needs of the child. Even when the mother is not working outside the family, she might have other responsibilities at home. Besides, mother may not always be temperamentally suited to answer all the queries put by the child almost endlessly.

The most important aspect of nursery and kindergarten school is to prepare the child for the school. The readiness for going to the school can successfully be effected by nursery school experiences. Parents, particularly of middle class cultural background, are fully aware of the value of nursery education.

The school environment is drastically different from home environment and in this context, outside agencies other than mother, can play a very substantial role.

It would build 'readiness' for learning by providing a rich variety of experiences suited to the needs of the child, which would enable the child to explore the world, simultaneously developing his potentialities.

If the child acquires some common skills during pre-school years, it will help him in his later adjustment in school. The difference between school environment and home environment is very marked; however, the difference between Nursery and Kindergarten school and home environment is not so profound. The child under 3 years of age gets easily upset by a slight change in his daily schedule; but from about this age onwards, variation in routine, if not too great, are more helpful than harmful, because they help the child to make adjustments to changed condition which, sooner or later, he will have to learn. Besides, the social contacts the child has with other children and adults in pre-school groups pave the way for his later adjustments in school. The child should learn the art of cooperation and competition which can properly be developed in semi-school environment.

The more time the child has to learn to make adjustments, the easier it will be for him later on; concentrated training in making adjustments rarely produces as good results as gradual

training over a longer period of time. Parents often endeavour conscientiously their child for school, however, they can never be sure whether they have done well until the child goes to school when they have an opportunity to test the preparatory steps taken by them.

With the theme of small family size being accepted, the child will have a lesser number of companions at home, and yet peer group experience is essential for the child. The joint family system is receding gradually, and child of today is also having a lesser chance to share experiences with his contemporaries within the family circle. Besides, family entertainment like outing is good, but it is never the same as when the child goes along with other kids to the zoo organised by his teachers. They learn new things in a new context.

The nursery school experience becomes helpful in making the child learn adjustment in advance. Group play, going for a picnic or to the zoo have also some role in inducing the child to conform to the discipline in addition to recreational values. The activities in nursery and kindergarten school also require a great deal of concentration of attention. This adjustment takes time, but later on children also learn to enjoy it. To help the child in developing the learning skill smoothly, simple games of counting, learning names of objects, colours and form identification, spelling of simple words are many of the items that nursery school programmes includes; and this training is

invaluable for the child, and he will take it as a fun as it becomes the part of a game. He also learns to exercise his reasoning capacity and can also take part in simple decision making process such as in play situations.

The child is supposed to make certain adjustments in certain important areas in a school. To be able to adjust successfully in school, the young child should be independent as far as self-help is concerned. Here the nursery school experience is very beneficial as most of them devote a great deal of time to constructive play skills which include painting, drawing, clay modelling, weaving, tossing and catching balls, racing, skipping, dancing, music, singing, elocution and the like. The child also learns social adjustment; he learns how to get along with other children of his age group. One very important aspect of social adjustments is learning to conform to certain standard in patterns of behaviour and in relation to other children. A child soon learns to give and take; he learns to share with others, he develops the rudiments of the trait of cooperation.

Such pre-school preparation is very essential for the vast majority of Indian children whose home background not conducive enough for intellectual, emotional or social experiences would contribute to their adequate psychological development. The privileged child perhaps can do even without pre-school attendance; the underprivileged need it rather badly. However, such facilities are mainly accessible to the children of the privileged persons as nursery education is quite expensive.

Only a negligible percentage of the children population (about 2%) can have the benefit of nursery school experience in a developing country like India. Still, the pre-school experience, though not easily available to all children, has a significant role in helping the child in ^{making} his later adjustments in schools. William James, one of the greatest Psychologists maintains that to an infant, "The world is a big blooming, buzzing confusion." And amidst these big blooming, buzzing confusion, the mother acts as a mediator in helping the child to have a relatively stable experience about his environment. Similarly, the Kindergarten experience can also go a long way in moulding the child's attitude and later adjustments in his schools, providing, of course, the authorities of the nursery and Kindergarten school do operate with a sense of devotion and service to the community.

CONCLUDING REMARKS

For the fullest development of the child physically, mentally, socially and emotionally and to make them effective citizens for tomorrow, variety of adequate experiences need to be provided to meet their varying individual abilities, interests and needs. Rearing up of children is not the responsibility of the parents, or the family only. This responsibility has multidimensional aspects; Home, School, Community, Government, Voluntary Social and Political organisations—all have a part to play in executing this great task not only for the sake of the child but for the nation building.

Although home and the school are the major institutions responsible for the over-all development of the child especially during the formative years, yet its services can be made more effective and its functioning enhanced, if it is assisted by other agencies in the community. If all concerned play their role conscientiously, the nation would be enriched, full of quality human beings all round.

India has made special consideration for its children in the Constitution. It has established a National Board for Children with Prime Minister as its Chairman to monitor the progress of the programme for the care and development of children. Since Independence several programmes have been undertaken for children. The National Children's Fund was created for the Government of India in the International Year of the child with the objective of giving assistance to voluntary agencies for their innovative projects relating to child development, the welfare of the handicapped, and neglected and needy children belonging to poor families. The management of the Fund was transferred to the NIPCCD, New Delhi in October, 1980.

A detail review for health and nutrition programme was undertaken by Government of India in the beginning of 1970. Several teams comprised by planners, administrators and technical experts reviewed the on going Programme by field visits and study of available records. It was decided to develop an integrated approach to provide essential health,

nutrition and educational services to the preschool children for their optimal development. A project known as Integrated Child Development Services (ICDS) was launched on 2nd October, 1975, with the objectives of (i) improving the nutritional and health status of children in the age group 0-6 years; (ii) laying the foundations for proper psychological, physical and social development of the child; (iii) reducing the incidence of mortality, morbidity, malnutrition and school drop out; (iv) enhancing the capability of the mother to look after the normal health and nutritional needs of the child through proper nutritional as well as health education; and (v) achieving effective coordination of policy and implementation amongst the various developments for promotion of child development.

ICDS programmes are supposed to provide services to the pre-school children below the age from 0-6 years, pregnant women in the second and third trimester and lactating mothers for the period of 6 months. Pre-school education to the children and functional literacy for women are also included in the programme.

The National Institute for Public Co-operation and Child Development (NIPCCD) is the apex body for training of the ICDS functionaries.

In the New Education Policy (1986) the child-centred approach has been recommended which states that, "a warm, welcoming and encouraging approach, in which all concerned share a solicitude for the needs of the child; is the best

motivation for the child to attend school and learn. A child-centred and activity-based process of learning should be adopted at the primary stage....As the child grows, the component of cognitive learning will be increased and skills organised through practices."

In this backdrop the value of early education has tremendous implications. It is true that in the last three decades or so, the spread of primary education in the country has been phenomenal, even though it has not been possible to fulfil the cherished goal of making it compulsory for all children of age range 6 to 14. For a rapid development in all spheres of life, both material and cultural, children are to be recognised as the real resource for the nation. It is, however, a sad commentary on the average Indian child in an urban set up where he is seen to start for his school in the morning with an unduly heavy school bag on the rucksack, forcing him to maintain a bending posture.

The morning scene in a typical middle class family is rushing up things. The whole home is chaotic; More often than not, the child is forcibly awakened from slumber and is being made ready for going to the school. He starts his day in the midst of confusion, utter chaos and rush. He is being urged to hurry up lest he misses the school bus. Mummy is screaming or coaxing to finish his breakfast quickly; daddy and other members of the family are also doing a lot of running about for him. Such a scene is anything but conducive for the development of self-confidence in the child.

The school climate also is not always supportive enough for the natural blooming of his personality. It fails to generate a clear direction at different spheres of development and growth : The child is liable to develop a negative attitude towards education. Existing examination system also keeps the child always under tension; the family also puts in lots of pressure to make him enter into the area of severe competition with classmates in order to beat them.

So far as numerous primary schools currently established all over the country are concerned, Roth (1984) noted that "On the whole most of the primary schools present a dismal picture of neglect, social callousness and apathy. If children have early education in places, fit for pigs, most of them are likely to behave like pigs in their adult lives." "Not only the physical environment of the school is poor but nobody seems to show any interest in the children in the early years. The parents feel relieved by sending away their children to schools. The teachers blame the parents if the children do not do well in the schools, The public blames the teachers for the ^{wayward} behaviour of the children. But hardly any attempt is being made to coordinate the activities of all these people concerned with children."

The child needs to be placed in a school environment with all kinds of cognitively stimulating conditions. Different type of constructive play materials including, books and magazines are some of the essential requirements which help

in developing cognitive and creative abilities in the child. He should get the facilities for different expressive activities, such as painting and dancing.

Rath (1984) has suggested that the primary schools should be closely associated with productive activities of the locality such as farming, gardening, fishing, poultry and other productive activities available in the locality. This would help the child in getting to know common man better in his understanding of the world around him.

Educational technology has developed to such an extent that a lot of information can be imparted in a very interesting manner in a short span of time. The child can also absorb it much more easily.

Teacher's preception of teaching also sometimes damages rather than helps in developing the child as an individual . He often introduces a package of ready made solution to the existing system of syllabus oriented examination for the sake of curricular development. There is absolutely no scope for identity with the teacher.

The SC/ST and other backward children (though have been given statutory facilities in the Constitution) do not feel encouraged to continue with their study because of lack of genuine concern from the teacher as also because of poor parents who like to hold them back for domestic chores or work in the field. It is found that due to poor educational family background

of the disadvantaged children the teachers seem to have low estimation of their intelligence and educational abilities, compared to other children. This discouraging attitude of the teachers is imperceptibly transmitted to these children in the classroom situation. This inevitably creates a negative study atmosphere for the already disadvantaged children.

No educational programme can ever be a success unless the teachers are warm, flexible, affectionate and have patience and a genuine concern for the students.

Women also constantly remain a vulnerable group right from the childhood. They suffer from social and economic pressures discouraging their entry into the educational system. The families who can afford education, would prefer the same for boys on priority basis : The girls would be asked to mind their younger siblings and forced to join in the daily chores of household works.

In this backdrop, the basic primary education has tremendous implications. But, even basic to this basic education is pre-school education. Value-oriented education and vocationalisation are two important aspects of education; and Educational Institution has a definite role to play in the development of a child. The values over the year have changed considerably. Children exhibit behaviour not necessarily corresponding to the expectations of parents. The child faces a conflict, he fails

to develop a healthy identity of self and social development. Parents set a gamut of values to be acquired as models by children which hardly find place in day to day life situation. Disparity in the poor group becomes obvious. Generation gap is invariably present. It is plausible to assume that family as an institution has certainly a role to play in developing the right kind of attitude in a child. A child spends more than 60% of his time in a day at home. Moreover, there is a good deal of agreement among psychologists that early childhood experience plays a crucial role not only in the cognitive development of the child (Clarke, 1984), but also in the shaping of his personality.

The mother is the sole socializing agent during early childhood. Though the mother is the primary picture in the early childhood, the role of father is also equally important. Studies have shown that discipline by the father emerges with increased significance with the older children, if not so with the younger ones. Examination of other social factors as well as constitutional predispositions have equal relevance in personality development of the child.

Various kinds of experiences shape the child's perception of his parents, other than the child rearing practices. The child, is exposed to varied sources of information and numerous socializing agents other than his parents, such as peer group, teachers, the mass media of communication like television/Video, which provide frames of reference with which the parents are

evaluated. What the parent actually does, may in some cases, become less important so far as child's perception is concerned, than the extra-familial influences which provide interpretations of parental behaviour (Sen, 1977).

Although part of a child's socialization takes place through direct training, much of a child's behaviour/^{al} repertoire is believed to be acquired through identification with the important adults in his life. A similar phenomenon, popularly known as 'hero-worship,' takes place during the adolescent period.

The child starts his voyage for life through play and fellowship forming an identity reflected in a growing strength of will and sense of purpose. The foundation of personality becomes cemented and a sense of trust, assurance and hope continues to grow in the family and social environment. The modalities of growth in the period of childhood are the family and junior school providing opportunities for play, group activities, manual work and artistic expression in the form of drawing, singing, dancing etc. The roots of behaviour, intelligence and character are nurtured in childhood which help in coping with subsequent life situations.

In adolescence, his physical and psychological framework take shape in finding one's moorings in the outer world; he is supposed to develop competence and fidelity. The educational opportunities at the time of adolescence should introduce the

young person to the broad physical and educational achievement. It is the time to develop skills, attitudes and knowledge. Various alternatives of learning opportunities and experiences should broaden the scope of choice and activity. The sense of duty and discipline are developed in this time as also the trait of sharing with others. The educational modalities at this period are home and senior school, the experience of fellowship, friendship, and guidance of the teacher. Educational experience of adolescence induces development of skill and knowledge, manual work, social work, crafts, games, dance, music and other valuable activities.

In youth, the creative urge finds expression in competitive achievement, voluntary enterprise and adventure. The seeds of love and care are sown at this stage of life. The foundation of life long education are based in the youth; and depending upon his aptitude, higher education is received through formal study, work, experience and cultural activities. Specialisation and experiences should be afforded and the educational programme geared to enrichment of human relations. The youth receives college and University education and learns from work experience and gets introduced to social and technical world. The pursuit of sports and games leads to discipline, and the work contributes to overall source for values which is the prime interest at this stage of development. The discipline of Psychology and its ever increasing applications can guide significantly man's transition to a new dimension of being and becoming, toward a quality of life derived from the process of life long education and culture.

The major objective of early education is to assist the child in the process of integration of personality in the form of physical, cognitive, emotional and social developments. The modalities of different educational programmes therefore, are needed to be such that they provide adequate opportunities for each child-male or female, to develop him or her into a socially sensitive, humanistic, conscientious, fearless and value oriented citizen to meet up challenges in different spheres of life.

R E F E R E N C E S

- Clarke, A.M. (1984). Early Experience and Cognitive Development. In Review of Research in Education, Ch.4, P.125-157.
- Hurlock, E.B. (1970). Child Growth and Development, IV edition, New Delhi, Tata McGraw-Hill.
- Pathak, K.B. and Saxena, F.C. (1980). Revised estimates of orphans and probability of orphanhood by the category of various age groups of the child population in India and the major States. Bombay, IIPs (Ms.)
- National Policy on Education (1986). Ministry of Human Resource Development, Govt. of India (Dept. of Education) New Delhi.
- (1984)
- Rath, R./Early Education : The Basic Foundation of all education Primary Education. P.21-38.
- Satya Bhusan (1986). Reaching out of to the Interior, The Times Journal of Education (Ed. Paul Flatten), The Times of India, March 22, P.12.

Sen, Anima, (1977). The developing child and the role of pre-school experience on him, Archives of Child Health, 19 (3), 12-71.

Sen, Anima, (1984). Role of Family in the development of the child, Parents and Paedagogues, 11 (2), 7-13.

Sen, Anima, (1987). Role of nutrition in Human Development, in B. Mohanty (Ed.), Nutrition and Child, Cuttack, Parents and Paedagogues.

Sen, A.K. and Sen, Anima (1984) Cultural Deprivation and Mental Retardation, New Delhi, Northern Book Centre.

Tandon, B. (1984) in Nutrition and Brain B. Tandon and G. Gopinath (Eds.), New Delhi, INSA.

TITLE OF PAPER: VALUE ORIENTED EDUCATION THROUGH BETTER
COMMUNICATION BETWEEN TEACHERS, PARENTS
AND THE COMMUNITY

Anant Pai*

Not long ago, I was one of the speakers at a youth training programme, organised in Bombay for graduate and postgraduate students, during the summer vacation. I can still vividly recall how the students were listless and bored and made it apparent by heckling the eminent persons, who addressed them.

I was slated to be the fifth speaker, but the convener suggested my addressing the students, soon after the welcome and the inaugural speeches. I began by telling them the story of the cowherd of Alawi. One day, when he heard the Buddha would be giving a discourse in his village, the cowherd felt extremely eager to listen to the discourse. Unfortunately, one of his cows strayed and by the time he could herd back the cows, it was late and the cowherd had no time to have a morsel of food even though he was hungry. When he reached the venue, Buddha was about to begin his discourse. Instead, Buddha called his disciples aside and asked them to feed the cowherd first. Only after the cowherd had eaten and taken his seat among the audience Buddha began his discourse. Later,

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explaining his action to his puzzled disciples, Buddha said, "Oh a hungry stomach, the man would not have been receptive to my words."

Concluding the story, I said at the function, "My friends, I told you this story for the same reason. You do not seem to be receptive right now. Let us try to understand why you are not. May be that might help restore the mood to listen. I have a feeling that many of you - rather most of you - wanted to take up courses in science and later wanted to become engineers or doctors. When you could not get admission to courses of your choice - rather, courses of your parents' choice - you felt rejected by the society. To put it more dramatically, you felt as if you have been thrown on the rubbish heap by the society. You felt like second-class citizens. Your rebellious attitude is a result of that sense of rejection. If you think this is true, please raise your hands."

Hesitantly, half a dozen students raised their hands.

I exhorted them, "सत्यमेव जयते" "Satyameva Jayate". There is nothing higher than truth. Let it not be said that you do not even have the courage to admit what is. As Buddha used to say, our first major concern should be ^{to} understand what is. If what I have said is true, please raise your hands."

Barring a few exceptions, mostly girls, the entire gathering raise the hands! !

The Efforts to impart Value Education

I have mentioned this apparently insignificant incident at this learned gathering for the simple reason that it may help us to understand what is.

For nearly two decades now, there has been much talk about value education. The service clubs like the Rotary and the Lions, the religious movements like Hare Krishna movement, Satya Sai movement, the religious missions like Ramakrishna Mission, Chinmaya Mission, Swami Narayan trust, institutions like Bharatiya Vidya Bhawan - all seem concerned about value education. Everyone seems to have his own diagnosis and a special kind of remedy.

I recall, at the annual convention of the Indian association of Educational Technology, held in 1984, a learned professor had said that one way to deal with indiscipline among students is to dispense with lectures altogether and to have centres of learning, where books, magazines, videotapes and computers should be made available to the students.

A leading institution has started publishing cultural courses. The argument seems to be: if medicine can be given in capsules, culture too can be administered in the same way.

At some parent-teacher association meetings, even remedies like disciplinary measures and punishment have been seriously discussed.

Many are the physicians who have tried to diagnose what ails me, but no one knows what I suffer from, said Mira.

No Clear Thinking on Value Education

I have been quite impressed by the document on the National Education Policy, particularly the points made and the remedial measures suggested under the headings:

Making the system work

Media and educational technology

Sports and physical education

The evaluation process and the examination system

The teacher and teacher education

The emphasis on vocationalisation.

These are areas where it seems there is a thorough understanding of the underlying problems. The goals too are clearly defined, though the line of action is vague. For example, it is certainly true that vocationalisation can stop the drifting tendencies among the students who undertake these courses. These courses can give them a sense of purpose, particularly if arrangements are made either

to get them jobs or to settle them in their profession, at the end of the courses. But how the teaching cadre for this ambitious plan is being prepared is not clear.

As far as the subject of value education is concerned I think there is no clear thinking even about the objectives.

The statements made under the heading, "Value education sound like platitudes. There are pious statements like: "In our culturally plural society, education should foster universal and eternal values, oriented towards the unity and integration of our people. Such value education should help eliminate obscurantism, religious fanaticism, **violence** superstition and fatalism."

"Apart from this combative role, value education has a profound positive content, based on our heritage, national goals, universal perceptions. It should lay primary emphasis on this aspect."

These statements make as much or as little sense as the well meaning statements made at gatherings organised by religious and cultural bodies.

Said Kabir :

नाग न जाने गोबि का बिन जाने किन जाके
चलता चलता हुआ भया, पार कोस पर गोबि

I did not know the name of the place where I wanted to go. How could I reach there? I walked for yugas, ages, to reach a place which was but half a mile away.

Weakness is the true guise; wickedness lies

Recently, at a meeting attended by devotees of a religious movement, people were exhorted to follow the path of righteousness, to desist from wickedness and to be good. When I was asked to address the gathering, "I began by saying: "Perhaps I may say things which may not be consistent with whatever you have been hearing all along. Because I believe, all wickedness stems from a sense of self-esteem, a sense of self-acceptance. Much that I may say, may seem inconsistent with what you might have heard. It is not inconsistent with religion, as I understand it.

तद्विज्ञानं विना न विदुः

Na ayam atma balabodhana labhya, say the Vedas. This atman, this great truth will not be attained by the weak.

I have modified this further, "This Atman, this great truth is not attainable by those who THINK they are weak.

All virtues spring essentially from the sense of self-esteem. To minds, accustomed to the idea of fighting with wickedness as a noble mission of life, my words did not seem reassuring. "Should we not tell youngsters not to tell lies?" asked one.

"If the youngster has enough sense of self-acceptance, he will not lie," I replied.

"Should we not teach them not to steal?" asked another.

"Teach them by all means. But it is not necessary to teach the one who has self-esteem and self-acceptance. If he does not have these, no amount of teaching will prevent him from stealing, particularly in his hour of need," I replied.

Before the others could point out about other virtues, I added, I honestly feel that the one who has self-esteem will easily appreciate others for whatever talents they may have. He will learn to help others in their difficulties. He will learn to love, to give and to share what he has."

I then narrated many incidents from my life. Many youngsters who were considered to be antisocial, shunned by others because they behaved like goondas, behaved much better, once they were made to feel strong from within.

"Tragedy is the true guise; comedy lies," said Hardy.

I have restated it thus: "Weakness is the true guise; wickedness lies."

Of course, it is likely that those who have been exposed to ruthlessness for long; those who have been made to feel weak for a long time, might turn out to be so insensitive that unless there is a man like Buddha or Mahavira, a Gandhi or a Christ, he could be a nuisance to the society.

How our Education System bruises the Self-Esteem of Youngsters

During a visit to Delhi in 1978, in my presence the principal of a local school told the parent of a five-year-old boy, "How many times have I to tell you that this child has failed in the test and cannot be admitted to the school?"

That chubby, sweet child of five, the apple of his father's eye, the most precious possession of his mother, had met with rejection for the first time in his life - and in what a dramatic way! The child looked at the face of the father, then at the face of the principal and then again at the face of his father, kept his little fingers on his ears and began to cry loudly!

Wouldn't that be a traumatic experience in the life of that child? I am sure that the principal must have undergone courses in educational psychology, at least as part of the B.Ed. or M.Ed. courses. How could he behave so irresponsibly? Shouldn't what we read have an impact on how we behave?

Later, when that child would take his report home and show them to his parents, who are ever keen that their child should stand first or at least get a top rank, wouldn't he live with rejection and the fear of rejection, again and again? What about the deep sense of insecurity he would feel when he enters the tenth standard and later, when he enters the twelfth standard? What about the sense of rejection and the fear of rejection, he would feel, when denied admission to a course of his choice - or rather, a course of his parents' choice? Right at the outset, I quoted a real life incident to show the damage done by such fear of rejection.

The walls of stone and mortar that people built in the bygone days to protect themselves against the onslaught of the enemy were visible. But the mental barriers in the minds of youngsters behind which they cower, ever ready to hurt, ever ready to hit "others", whom they have thrown outside those barriers are not seen. They are there all

the same. These "others" could be others because they speak a different language; because they belong to a different religion; a different caste; or a different class of society.

The crux of the problem in value education is this, Recognition of the child's need for self-esteem. This stems from self-acceptance. Indian mythology is full of symbolism. Shiva is said to be consort of Shakti. Shiva literally means the good. Shakti means strength. Symbolically, we are told that where strength is goodness is. All that we have to do is to make the children feel a sense of self-acceptance and self-esteem. Yet, how many teachers cater to this need of the child? I quoted the words of a principal of a local school to show how callous we are about the impact of our words on impressionable minds.

The parents, whose behaviour and whose words affect the child in a far more profound way, understand this need of the child much less than teachers. Just because the parents are well educated, it does not necessarily follow that they know how to impart self-esteem to the child.

The Classic Case of Dibs

In the classic example, described by Virginia M. Axline in "Dibs in search of self", the father is a top scientist and the mother is a surgeon. Yet, because of their inability to develop a sense of self-esteem in their child, he turned out to be a liability not only to them, but also the society.

To quote from the book, "Most of the time, he (Dibs) crawled around the room, lurking under tables, rocking back and forth, chewing on the side of his hand, sucking his thumb, lying prone and rigid on the floor, when any of the teachers or children tried to involve him in some activity... he would back up against the wall and put his hands up, ready to scratch, ready to fight, if anyone came too close."

The boy would have been a nuisance after growing up. If this did not happen, it was because a counsellor who spent sixteen thursdays with the boy, made the child accept himself and thus develop self-esteem. Soon Dibs, considered dull, ~~unint~~elligent and antisocial, improved his performance to such an extent that he had soon to be admitted to a school for the gifted what is more, he developed leadership qualities!!

Wanted: Better Communication between Parents and Teachers

Is there a parent who does not mean well by his children? Yet, is it not true that parents keep bruising the self-esteem of their children and make them feel insecure? There should be better communication between parents and teachers like Virginia Axline, if we do not wish to have too many Dibs on our hands.

On the occasion of functions like school-day or teachers' day, we do remind ourselves that the objective of education is to bring about a change in behaviour; not just to add to the information. We even quote platitudes like:

Sa vidya ya vimuktaye. That is education which liberates.

Actually education is looked upon as the means of obtaining more possessions. If there is a mad rush for courses in engineering or medicine, or computers, it is certainly not because they bring about a change in behaviour; not even because the youngsters have a genuine aptitude for these courses. It is simply because these courses fetch better-salaried jobs. The frustration in the youth doing arts, commerce and even the degree courses in science is basically because they feel they have missed the bus."

Self-esteem is not generated by possessing more, but by being more. Self-esteem stems from what one is, not what one has. There is, however, so much of emphasis on what one has that not only the parents fall into the trap, they lead their children into the trap. Worse still, even the teachers who are supposed to hold the beacon light, fall into the trap. More about this later.

Once after witnessing senseless violence in the area, in which I live, I had made a sample study of youngsters involved in the violence. I had found that youngsters who had the benefit of some education were involved in the violence. Hardly any illiterate youth was involved in the violence, though there are quite a few illiterates too in my neighbourhood.

Apparently, those half-educated youth were better informed than the uneducated ones, but they were certainly not better behaved than the uneducated ones.

The students who go through our education system come out as the following end products:

1. A sizeable section of the students, whose expectations of possessing more as a result of education, are not fulfilled, and who think the society is responsible for this state of affairs, turns violent.

2. A sizeable section of the students, whose expectations of possessing more as a result of education, are not fulfilled but who think this is due to their own incompetence, turns escapist. Some take to minor forms of escapism like addiction to movies or gambling. Some take to more serious forms of escapism like addiction to drinks or drugs.

3. A small section, which develops some self-esteem, but not in full measure, because their parents are enlightened because they get admission to courses of their choice or because they land in lucrative jobs, play a useful role in the society in their jobs. Many of these - as I said, this section does not have self-esteem in full measure - hanker for jobs outside India and though they have been educated at the expense of the tax-payers' money, at the expense of the poor and middle class of the country, leave the country at the first available opportunity, settle abroad and scoff at their country and their countrymen!

4. A very small section, which develops genuine self-esteem and has self-acceptance, learns to love, to help and to share with others what they have.

The last section is almost like an oasis in the desert and there is the danger of the sands of the desert overrunning the oases!

Do Teachers have Self-esteem?

Once we admit that the crux of the problem is to help develop a sense of self-esteem and self-acceptance in children, the next question is: who is supposed to do it?

Politicians? Certainly not. They have a vested interest in making people feel they are weak. Only weak people would flock behind leaders in such large numbers. Leaders of any brand say something like this, "Look you have problems. You are weak. You are not well looked after. I am here to see that you or your group or community will be well looked after. Come behind me."

Parents? Again the answer is in the negative. We saw how even well educated parents do not know how to inculcate self-esteem in their children.

The community or society?

महात्मा जैन और गुरु पण्डित

The path trodden by the great ones is the path followed. Teachers - particularly the acharyas, true teachers - have to give the lead. The argument that even our lives are shaped by the politicians, is only an excuse.

About three years ago, when I visited Jaipur, I was invited to address an informal meeting of an association formed by teachers (lecturers and professors) of Rajasthan University. One of the points raised by a professor on the occasion was the lack of respect commanded by even university teachers in the community. I had then asked my question, "Do you respect yourself? Do YOU have self-esteem? Or do you see yourself in the mirror, placed before you by those around you? If you have self-acceptance, what does it matter what the others think of you?"

I had also expressed the view that if a person has **self-esteem**, the people around cannot but take cognizance of it. In the story of Alexander, we come across a person, referred to as Dandamis by the Greeks, who refuses to call on Alexander, when he receives the summons for the simple reason that he seeks nothing from Alexander. Finally Alexander goes to meet Dandamis.

I recalled how the tahsildar of our village used to stand up and receive the headmaster of the local primary school, who drew a fraction of the salary drawn by the tahsildar.

It is for the teachers to inculcate self-esteem and then start a chain reaction through the parents, through the press, the T.V. and other communication media to help inculcate this in the younger generation.

Said Buddha, "वीतदरं विषम्युतं अकिंचनं अनादानं तमहं ब्रूमि ब्रह्मणम्" "Veetaddareṃ, viṣamyutam, akincanam, anadaanam, tamaham broomi brahmanam."

Him I will call a brahmin, said Buddha who is trully unattached, fearless, who has no possessions, nor desire to accept them. A tall order. Certainly a difficult ideal to follow. Teachers, no doubt, should be well paid. But who is going to define what is "a good pay", particularly when one compares the wages paid by the pharmaceutical industry to its workers or by the airlines to their employees. The teachers must get enough to meet their requirements and this has been recognised in the National Policy on Education. There can, however, be no comparison. If the teachers will not realise it, no one else will.

How to inculcate self-esteem?

I hardly need tell how self-esteem has to be inculcated in youngsters. Even the principal, whose example I quoted earlier, must be aware of not only the need to inculcate self-esteem but also how to inculcate it.

Every child is unique, every one is capable of playing a useful role in the society so long as he has self-acceptance and self-esteem. True, the media like Vividh Bharati and even Doordarshan seem to undermine the efforts to inculcate self-esteem by advertisements like, "Neighbours' envy, owner's pride" and the hundreds of TV spots which encourage the urge to possess more. But a person who has true self-acceptance, who gives far more importance to what he is, rather than what he has, is not likely to be swayed by such media.

There is need, as I said earlier, to expand the few oases in the desert. To do this, we must first have a clear objective of what we wish to achieve. If it is conceded that good behaviour stems from self-esteem and self-acceptance, we should take steps to inculcate these in our teachers first. True, teachers have to attend to the needs of their family. But during Christmas vacation or the Divali vacation, four-day camps could be organised for orientation and refresher courses aimed at teachers. The chain reaction, I am of the view, has to begin from teachers.

As I said earlier, even many who are well qualified and land themselves in good jobs do not have self-acceptance in adequate measure. Bold steps have to be taken to correct

the situation. Psychologists tell us that even if there has been a traumatic experience in the life of an individual, he can be well adjusted to the present and work fruitfully for a bright future, if he accepts the past. This is equally true of a nation. It is my view that if Japan has advanced so well in even the economic sphere and if the Japanese have a high sense of patriotism, it is because they do accept their country's past.

Notwithstanding some dark patches, there is much that is worthy of acceptance in India's past. I find, however, there is hesitation in exposing our students to this past. I recall, when I had first arranged a quiz contest on Indian mythology and history in Goa, my assistant came back from many schools, run by the minorities, with a negative response. I invited a few people from the press and explained how I had brought out titles on great men belonging to all the major communities and regions in Amar Chitra Katha. As for the stories from the Ramayana and the Mahabharata, I said, no one need believe in Ram or Krishna as a god; but these epics were the heritage of all Indians. The next day, almost all schools of Goa, including those run by the minorities sent delegations of students to take part in my quiz contest.

Now using the audiovisual and the video media, efforts are being made to acquaint the viewers with the philosophical thoughts of the sages and seers. We need not restrict ourselves to thoughts presented by Indian sages. But along with whatever is thought-provoking, even these too should be presented. Let the discrimination come from the viewers. Let them accept what they would like to accept. Out of that acceptance will grow self-esteem.

TITLE OF PAPER: THE PROCESS OF DEVELOPING HEALTHY COGNITIVE STRUCTURES FOR SOCIAL COHESION AND NATIONAL INTEGRATION AS AN INTEGRAL PART OF CHILD-CENTRED EDUCATION.

Moazziz Ali Beg*

This paper is intended to explain how a permanent solution for the menacing problem of communal hatred can be evolved through a well-integrated child-centred education, and how such programme of education under our National Policy can actually create positive sentiments of love, affection, regard, and a genuine respect among members of sister communities in their inter-personal and inter-group relations. Child-centred education can be most effectively geared to attaining the desired goal of National Integration and we believe that the role of a psychologist is most crucial and important in bringing to fore those inner resources of humans that are quite indispensable for making the child-centred education effective in this regard. We also believe that an immediate application of this scheme is a matter of National Urgency.

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The cultivation of a child's mind implies building up / of cognitive structure which tend to operate as value-attitude-meaning systems and seem to be clinched with a kind of sentimental substratum operating like a feedback mechanism for sustaining the cognitive structures. Love and hatred are dynamisms within these structures and play a very decisive role in our reality orientations toward inter-personal and inter-group relations. These dynamisms have their respective gradients which might accentuate in their respective directions depending on strength of cognitive structures which either blocks or facilitates alternative perspectives of reality.

The mind of a child is highly receptive to aforesaid feedback operations and within the developmental perspective therefore, the genesis of the dynamism of communal hatred can be understood on the parameter of value-attitude-meaning system where cognitive structures are made up of 'pictures' of the members of a certain community as bad, unworthy, to-be-despised-repulsive, dirty, brutal, and so on. Such dynamisms tend to become very obstinate in the presence of a high frequency of gradient accentuation.

The inculcation of healthy cognitive structures through a well-integrated child-centred education takes us in the direction of creative altruism which is understood here in the context of Sufi and Bhakti traditions of Bharat, and if our children can be taught to respect different religions and love people of different communities unselfishly, we would be taking a revolutionary step ahead for National Integration. We may therefore proceed to discuss the ideas presented above.

THE TERM COGNITION according to Neisser (1967) "refers to all the processes by which the sensory input is transformed, reduced, elaborated, stored, recovered, and used." He believes that the operations of cognitive processes does not necessarily depend upon relevant stimulation and images and hallucinations are examples of their independent operations. Cognitive processes enter into hypothetical stages through thinking, recall, problem solving, imagery and perception, etc. Eventually, of course, cognitions are built up into cognitive structures constituting our frames of reference comprising of meanings and developing into value-attitude-meaning systems. They are treated by Neisser as the third level of cognitive construction. Objects, persons, and situations are referred to frames of reference maintaining the background Schemata which is described by Shor (1959) as the

only significant person who is entirely responsible for directly inducting anxiety in the growing infant. In the context of relevant findings and highly systematized theories of Sullivan, Adler, Horney, Freud and others, it is apt to conclude that early experiences constitute the sentimental substratum of those cognitive structures that develop through different stages of development. If we examine closely the differences between the periods of 'concrete operations' and 'formal operations' of Piaget these substratums tend to continue through the different stages. In this regard a very deep insight is provided in the contribution of Ayurveda to the Indian image of childhood as it is exhaustively brought out by the Indian writer Kaker (1982) who points it out that "Psychological, through their periodic ritual reassurance of familiarity and mutuality, the Samskaras seek to counteract the child's regressive longings and primal fears of abandonment and separation, which are invariably activated in the transition from one stage of life to another." (205) These very substratums tend to operate as feedback mechanisms and accentuate a certain dynamism if objects, persons, or situations are referred to a specific configuration of cognitive structures quite frequently. Since the cognitive structures and their sentimental substratums develop interactively, the different stages of development

tend to determine the probability of modifications and changes in terms of alternative reality orientations. The present authors believe that it requires intensive research to check those formulations which are purely theoretical at the moment but ^{they} help us a great deal in taking us directly into the problem of the genesis of the dynamisms of love and hatred whose intensities can be safely treated as gradients for theoretical and methodological purposes, having their full implications for a programme of child-centred education.

AS REGARDS THE GENESIS OF hatred, the crucial observations of Maslow through child data, anthropological studies, clinical data, and data from genetics and endocrinology plus his own theoretical considerations convincingly lead us to the conclusion that hatred, aggression and destructiveness do not constitute the original sin ⁱⁿ the child's personality, rather they arise as a sequel to early deprivations from love and caring. Maslow writes: "Psychologists and psychoanalysts often have conceived of the infant as a little devil, born with original sin and with hatred in his heart. Certainly this undiluted picture is false." If one looks at a healthy and well-loved and cared-for infant, let us say up to the age of one year and perhaps later, then it is

quite impossible to see anything that could be called evil, original sin, sadism, malice, pleasure in hurting, destructiveness, hostility for its own sake, or deliberate cruelty. On the contrary, careful and long-continued observation demonstrates the opposite. Practically, every personality characteristic found in self-actualizing people everything lovable, admirable, and enviable is found in such babies -- that is, except knowledge, experience, wisdom. One of the reasons that babies are loved and wanted so much must be just this -- that they are without visible evil, hatred, or malice in the first year or two of their lives." (122). It is evident from the observations of Maslow that absence of love and affection explains the genesis of hatred.

However, once the dynamism of hatred is created in the basic personality, it invariably relates to cognitive structures and to frames of reference governing our reality orientations in interpersonal and inter-group situations. Its accentuation on the gradient results in aggression, violence and destructiveness reaching up to organized terrorism. The anthropologist Honigsmann (1954) observes that "Aggression is an activity that seeks to destroy or deliberately inflict pain upon the object against which it is directed (Kardiner, 1939:60). Hostility (hate) represents an attitude or motivating

state impelling a subject to express aggression (other motives, however, ^{may} also give rise to the activity).

Both hostility and aggression may be turned against the actor as well as against substitute animate and inanimate objects in the actor's environment. A person who feels no conscious hostility toward an object may nevertheless use that object as target for aggression. (279). Concerning sociocultural sources of aggression, Honogmann writes: "Psychologically speaking, aggression may arise from hostility, conflictful dependency, frustration, and various kinds of threat. Anthropologists, however, are more concerned with the social and cultural conditions related to aggressive behaviour." (280). These considerations take us to the conclusion that hatred and its accentuated forms are essentially pathological and effective preventive measures can be adopted through a programme as envisaged under our National Policy for eradicating this evil.

COMMUNAL HATRED IN OUR COUNTRY carries a suppressed and diffused cluster of sentimental undercurrents that draw strength from our psychosocial environment which results in physical conflicts hurting and damaging our national prestige. The already existing cognitive structures continue to have feedbacks at the 'formal level' in such frequent manner that the possibility of any alternative reality orientation becomes increasingly minimized

due to some socio-cultural factors arising out^{of} our present imbalances and also due to the absence of a plan child-centred education geared to eradicate this evil. Our behaviour at the inter-communal level therefore remains loaded with inhibitions, a conspicuous lack of spontaneity and an almost total absence of feelings of acceptance for members of different communities.

Besides, we seem to have dissociated the formal aspects of different religious systems from the very spirit of religion with the result that a kind of spiritual perversion tends to surround the religious awareness of a growing child. He is therefore religiously isolated from his fellow beings and becomes incapable of seeing through the essential unity of different religions. His basic personality develops a kind of hatred-proneness due to this spiritual perversion. If we make an assessment of the intentional and unintentional processes of inculcating hatred for sister community or communities, we shall probably discover such things as facial gestures expressing disgust and despise, expressed feeling tones evoking empathic responses and reinforcing aversions, stereotypes settling down in the subconscious, and even intentional inculcation of hostility which amounts to committing crime against the ~~innocence~~ of a growing child. Hence violence, aggression, destructiveness, and extrem

of hostility are the consequences we are reaping since many generations. And now we have intentionally brought up an almost value-blind generation which is pacing ahead with the rapid dismemberment of a culture holding fast to the idea universal and eternal values. Since our National Policy of Education has accepted the idea of universal and eternal values we must be able to bring it up very clearly that such idea is ^{tenable} only through discovering the experiential route to those settled truths of human nature which alone can make the idea of the 'fellow being' sensible to us.

THE BASIS of healthy cognitive structures can be created through inducting love and affection under a well-planned child-centred education. A well-loved, well-appreciated, and well-accepted child would readily learn to love, appreciate feelings of others and respect them, provided he is consistently exposed to a home and school environment which intentionally inculcates a reality orientation where members of other communities are pictured as good, lovable, nice, acceptable and as deserving respect in their own right. This alone is the surest route to creative altruism whose manifest and spiritual aspects are contained in our own Sanskriti and have been manifested through Sufi and Bhakti traditions of Bharat. Sufi and Bhakti traditions amply provide a

for responding immediately to the need of evolving a consensus for the acceptance of the guidelines for a system of such education leading into the desired synthesis,

have
UNDER THIS consensus we can/a charter for the implementation of a programme carrying the spirit of Sufi and Bhakti traditions -- at least. The useful methods and techniques such as story telling, drama, play therapy, modified forms of encounter groups, more frequent televised programmes -- all such things can be used and tried out for inculcating healthy, nationally desirable, and health-fostering cognitive structures and their motivational substrations.

Besides, the technique of situation handling can be safely elaborated under the aforesaid guidelines which amounts to giving, or desirably channelizing, the motivation upthrust or bouyancy without warping the freedom of the child through repressive do's and don't's. The infusion of love, regard, caring for others, sharing in varying degrees, sweetness of temperament and such other qualities that are distinctly human, are not a logical process and no mathematical formulae can be evolved for creating them in the interpersonal relations. They are essentially experimental, subjectively operative and decisively effective. They can be made more effective if taken as

ideals, and also as the spiritual bases of our ethical conduct. In a school environment they require spontaneous expression in any aspect of interpersonal relations of teacher and his pupils.

Apart from the use and development of above mentioned techniques a programme of behaviour modification can be adopted if necessary and guidelines of a programme of behaviour modification through Vedantic concepts have already been drawn up by one of the authors of this paper which, at the moment, are available in unpublished form.

IT IS BELIEVED and hoped by the authors of this paper that ^{they} can possibly have unexpected results of a positive nature through the implementation of this programme and the evil of communal hatred, violence and destruction can be controlled and even eradicated, thereby allowing the process of National Integration to take its roots in our society for building up a sober, dignified and mature nation in the world.

REFERENCES

- Goldstein, K. - M. Blackman Sheldon. Cognitive Style; John Wiley and Sons, New York, 1978.
- Honigmann, John. J. Culture and Personality, Harper & Brothers Publishers, New York, 1954.
- Kakar, S. The Inner World; Oxford University Press, Delhi, 1982.
- Kardiner, A. & Associates, The Psychological Frontiers of Society, Columbia University Press 1950.
- Kellaghan, T. Abstraction and Categorization in African Children. International Journal of Psychology 3, 115-20. (1968).
- Kelly, G.A. The Psychology of Personal Constructs; Norton, New York, 1958.
- Maslow, A.H. Motivation And Personality; Harper & Row Publishers New York, 1970.
- Neisser Ulric. Cognitive Psychology; Meridith Publishing Company, New York, 1967.
- Okonji, O.M. A Cross-Cultural Study of the Effect of Familiarity on Classificatory Behaviour. Journal of Cross-Cultural Psychology, 1971, 2, 39-49.

Piaget, J.

Genetic Epistemology, Norton,
New York, 1970.

Price-Williams, M.R.

A Study Concerning Concept of
Conservation of Quantities Among
Primitive Children, Acta
Psychologica, 1962, 18, 197-305.

Shor, R.E.

Cognitive Psychology, Hypnosis
and the Concept of Generalized
Reality-Orientation. American
Journal of Psychotherapy,
1959, 13, 582-602.

Sullivan, H.S.

The Interpersonal Theory of
Psychiatry; W.W. Norton & Co.,
New York, 1953.

Tajfel, H.

Individual Consistencies in
Categorization: A Study of
Judgement Behaviour. Journal
of Personality, 1969, 32,
90-108.

Thomas, A. & Chess, S.

Temperament and the Dynamics of
Development. in Morton Bronter;
Cognitive Growth and Development;
Brunner/Mazel Publishers.
New York, 1979.

TITLE OF PAPER: EDUCATING THE CHILD WITH LEARNING
DISABILITIES -- A CHILD CENTRED APPROACH

Nirmala Gupta*

Education has always been meant for the pupil. But ironically while educating the pupil emphasis has always been on curriculum, on content of courses, on the teacher, on school and its management but not on the pupil. In view of the fact that pupil is the focus of all learning activities; what is obviously more important is how pupil learns, how he exercises the powers of his mind and body and how he thinks, understands and forms his judgements. Much of the child's learning in school and in later life depends upon his competency to use these basic faculties such as his thinking and reasoning, memory and imagination and other sensory perceptual abilities. These are especially needed for acquiring skills related to school learning such as reading, writing, arithmetic and communicating with others. Millions of children in our schools are not able to develop these adequately and face various educational deficits or handicaps, referred to as 'learning disabilities'. From an educational point of view

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the failure of an apparently capable child to cope up with rigid academic standards in school leads to a large number of failures and drop outs, hence to wastage of our educational resources. Many of these children leave the school system because of language deficits, inappropriate reading skills, problems of inattention, hyperactivity and memory disorders. These difficulties are not due to any physical handicaps, mental retardation and social or economic deprivation but due to malfunction and that too minimal malfunction of the brain caused by heredity, illness or emotional stress. However most children could be helped to overcome these deficits if our teaching practices and curricula were flexible enough to suit a wide variety of needs, readiness levels and learning styles of students. Contrary to this, present day teacher training and practices relate to subject matter areas rather ^{than} to developing learning skills or understanding the factors in the environment and/or the student that might interfere with learning. Although a few learning disabled (LD) may require special programmes for help, large majority of them are in regular classes. Our concern here, is to better understand the characteristics of such children, to identify developmental deficiencies, and to suggest to the teacher, activities and programmes to be carried out in the regular classroom to bring them into the mainstream. For those needing help of a specialist, teacher can play a supportive and cooperative role.

Research indicates that study of learning processes in the learning disabled could be grouped into five major areas; attention, preception, memory, cognition and encoding (De Ruiter and Wansart, 1982). A deficiency in any one of these areas may be involved in the development of inaccurate or incomplete mental structures. Characteristics of LD students include distractibility, short attention span, deficient visual and auditory memory, problems in visual perception, poor organization, poor feed back and discontinuity of thought.

The LD may be described by the teacher as one not able to think as other children do, exhibit similar kind of logic that other children of same age do, or may not assimilate new information in the same manner as his age peers. "Their learning is less efficient and apparently developmentally delayed" (Reid & Hroska 1981).

A child has a learning disability if he does not achieve upto his age and ability levels in

- (i) Oral expression
- (ii) Listening comprehension
- (iii) Written expression
- (iv) Basic reading skill
- (v) Reading comprehension
- (vi) Mathematical calculation and reasoning

A number of other characteristics occur with above average frequency each seen more often in LD than in the population as a whole. Therefore they are useful clues to the presence of a disability, their presence does not necessarily indicate that a given student is LD. Some of the other characteristics associated with these disabilities are :

- Hyperactivity - apparent in general restlessness, inability to sit still, incapacity to restrain impulses etc.
- Incoordination - Difficulty in writing or holding something such as catching a ball, stumbling or falling frequently, inability to assess problems in space and problems of balance or both.
- Over attention
or attention fixation- difficulty in shifting attention in a normal manner or focusing attention long enough to learn new material. Student may keep looking out of the window and does not respond to the teachers' attempt to attract attention.
- Perceptual disorders
- Of Visual Perception - Child may confuse left and right, top and bottom, forward and backward. Letter 'd' may be seen as 'b' or 'p' as 'q'. Referred, to as 'dyslexia' or word blindness, 'was' becomes 'saw' or 'sad' becomes 'said'

- Auditory perception - confuses 'tap' with 'tab' or 'wish' with 'witch', has difficulty distinguishing door bell from telephone ring, and one voice or sound against a noisy back ground.
- Memory disorders - difficulty in recall of information stored in brain, the teacher asks a question the response may come slowly.
 - difficulty in organizing information, putting data into proper sequence; shows up in spelling, telling time, in remembering order of days, months, seasons or in repeating a story. Child may start in middle, then tell the beginning and the end.
 - .. Cannot organize his own belongings, scheduling or anticipating events, lacks the ability to interpret and generalize e.g. having read a story about a dog, the child will not be able to build on that basis a discussion about other dogs.
 - .. Forgetting the lesson grasped perfectly during the class in a short time.

Characteristics listed show the range of problems L.Ds may face, very rarely does every sign shows up in one person. Psychiatrist Silver (1979) observes that disabilities tend to be grouped in one or two basic patterns. One may have disabilities in visual memory, fine visual motor co-ordination, the other may have disorder of auditory perception, auditory integration, auditory memory and language output. However it is the persistence rather than the temporary appearance of

symptoms that point to a child at risk. As the reasons for a child's disability are generally not understood, he/she does not receive the sympathy, concern and understanding generally shown to children with obvious handicaps. They are frequently, labeled as 'lazy', 'inattentive' 'careless', 'spoilt' the terms which they learn to associate with themselves and adopt a 'don't care attitude' and that 'studies are boring' or 'people are stupid'. LD's often develop secondary emotional characteristics such as hostility, regression, withdrawal, resistance to reward and punishment, depression, anxiety and stubbornness etc. A learning disabled child is often confused and frustrated as is evident from the following account of this ten year old boy.

"To be dyslexic is to feel different from anyone else and to be constantly ridiculed because you are stupid and an idiot, and you really begin to wonder whether it's true because so many people say that when you are 'dyslexic' the way I am it's so hard to play games that the other kids play, like baseball, I have the hardest time catching that stupid ball or hitting or even throwing it.

I talk a lot. and they call that my way out or hyperactivity. I think, in school I have trouble in English. I also don't get all the directions, like someone will send me out to get three things and I will come back with only two, but one of them wasn't on the list. It is so frustrating to do everything wrong (Tec, 1976)".

These are words of a boy who is sensitive and intelligent but is frustrated at the difficulty learning to do things that most sensitive and intelligent people do.

Silver (1979) referring again to his clinical experience estimates that 30 to 40 per cent of all school drop outs and juvenile delinquents are secondary to untreated, unrecognized learning disabilities. LD undetected and untreated affects all of life not just school, many 'learning disabilities' become 'life disabilities'. "Academic failure at any age can corrode a person's personality and self-esteem, leaving the dyslexic increasingly vulnerable to stress" (Saunders, 1977).

Roa Lynn a Journalist and author of the book 'Learning Disabilities (1979) at the age of 38 discovered that she was learning disabled. She describes her problems which had become a part of her life even after she had established in a career.

"For years I had hidden from my parents, sisters, teachers, friends, even my husband the fact that I can read only a few minutes at a time before becoming confused and exhausted. My problems extend beyond the ability to read well. Although I managed to earn a bachelors degree, I can neither recite the alphabet straight through nor do I know the multiplication and division tables. I add by surreptitiously counting on my fingers and my spelling is bizarre. I have difficulty in writing down the simplest note when someone gives me information - even a telephone number gets twisted in my hands. I am frequently bewildered by complex stimuli such as large parties, some kinds of music, and cluttered rooms. Although I have a good memory for events more than a few days old, I often cannot recall what I have recently learned."

Though Roy Lynn started working as a journalist, her difficulties affected her performance in work and she would often go into despair. In her words.....

"Although I have managed to work for publications such as 'Time' and 'Newsweek', my attempt to make a living as a reporter was like a 'paraplegic trying to become a professional football player'. In fact I was even unable to read through my own stories once they were published. Due to the exhaustion I experienced trying to keep pace with my peers, my career performance was uneven..... Groping in the dark, terrified that I was really stupid, sometimes without money to buy bare essentials of life because of my inability to hold a job, there were times when I considered suicide."

There may be many whose symptoms are much less distressing than the one given above but millions of people lead troubled lives because of these hidden handicaps. The answer lies in providing help to maximize the strengths and to capitalize on the unique coping mechanisms of a person. L.Ds often possess unparalleled survival strategies and problems solving potential. Many of them have considerable persistence and motivation (Roy Lynn 1979). Leonardo da Vinci, Albert Einstein, Neil Bohr, Thomas Edison, General George S. Patton, Nelson Rockefeller are all thought to have suffered from learning disabilities. It is evident, therefore, that learning disabled despite their handicaps are able to do extraordinarily good work. Society stands much to gain by ensuring that their potential contributions are not lost.

In unraveling of learning disabilities, therefore, much stands to be gained. For one thing, much suffering will be alleviated. For another thing, some of the unusual intellectual potential that many suggest may be associated with the condition, might be utilized for constructive purposes. In a country like India, much of the educational wastage could be prevented by providing help to children with these difficulties in schools.

According to most of the surveys about 10 million citizens of India are affected by serious disorders; twenty to thirty million from neuroses and psychosomatic disorders. Reliable data on learning and behavioural problems in schools are not available. However there is evidence that it is 1% to 2%. The National Sample Survey on Childhood Disabilities estimated that in 1981, there were 12 million persons in our country with one disability, constituting 1.8 percent of the total population. According to Dr. Bindu Prasad, Director of Child Guidance Clinic, Jamia Millia Islamia, Delhi, number of people needing mental health services is high but facilities for such services is limited. In a recent report NIPCCD also shows that there are only 66 Child Guidance Centres throughout the Country while there should be 6800 in order to provide one Child Guidance Centre for a population of 1,00,000. To meet this challenge

efforts will have to be made for preventive and promotive work through teachers in regular classrooms. Even if placement facilities were available, parents lack enough awareness of these difficulties and also may lack financial resources to afford these services for their wards.

Hence there is a dire need to build up an awareness among parents, teachers and educationists about specific needs and problems of these children and services to be provided to them in regular schools.

In the 17 MCD schools taken up for study at CGC, Jamia, Delhi, it was found that incidence of learning difficulties was very high. Major problem was of failures leading to drop outs. Psychoeducational assessment and developmental histories of these children showed that the low age of the child and delay in language and motor functions are related to poor progress in reading among first grade children. A short term teaching programme during summer vacations consisting of playway activities, promotion of self-concept, pre-reading and pre writing skill for language development was taken up. Most of the children showed improvement in language (vocabulary and verbal fluency) leading to improvement in self concept and self confidence.

Tailoring the Teaching of the Child :

The major reason why children have these difficulties is the expectation teachers and parents have, that every child must learn to read and write at the same time. We put pressure on children to adapt to teaching styles but not on educators to adapt to learning styles. The means by which we can help is to understand a child and his "learning environment and his learning style". Susan Tout, Chairperson of and Associate Professor in the Department of Learning Disabilities at the School of Medical Sciences, University of the Pacific, San Francisco says "Rather than viewing this whole thing as a learning disability the day is going to come when it will be viewed as different ways of learning".

Alternatives must be offered as a part of remediation such as reducing the writing demands or allowing the child to use a tape recorder or to select words from a pre-written list. Certain children may need a calm quiet place to study. Those who have worked with these ideas emphasize that every child that we deal with is unique, though teachers have a hard time accommodating to individual differences especially in large classes but certain strategies such as use of external rewards, praise and encouragement would stimulate intrinsically motivated behaviour and create a

efforts will have to be made for preventive and promotive work through teachers in regular classrooms. Even if placement facilities were available, parents lack enough awareness of these difficulties and also may lack financial resources to afford these services for their wards.

Hence there is a dire need to build up an awareness among parents, teachers and educationists about specific needs and problems of these children and services to be provided to them in regular schools.

In the 17 MCD schools taken up for study at CGC, Jamia, Delhi, it was found that incidence of learning difficulties was very high. Major problem was of failures leading to drop outs. Psychoeducational assessment and developmental histories of these children showed that the low age of the child and delay in language and motor functions are related to poor progress in reading among first grade children. A short term teaching programme during summer vacations consisting of playway activities, promotion of self-concept, pre-reading and pre writing skills for language development was taken up. Most of the children showed improvement in language (vocabulary and verbal fluency) leading to improvement in self concept and self confidence.

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desire in the children to learn. Children develop deficiencies when they are faced with tasks for which they are not developmentally ready or motivationally ready (Adelman, Director, Fernald Laboratory, U.S.A.1978).

Before using any 'idea' or technique therefore the teacher must make sure that it is appropriate to the student in question and that he/she is ready to benefit from it.

As much attention should be paid to understand how the student learns as to what he learns, how he approaches and organizes learning to help him improve his learning strategies.

Some more suggestions have been given to deal with specific disabilities which can be adopted by the teacher having minimum of resources (Gearheart and Weishahn, 1984).

For **hyperactive** or highly distractible student, activities that involve fewer distractions should be assigned. Child's seating arrangement may have to be changed, i.e. giving him a quiet place with minimum of distraction. Amount and type of material on his desk should also be minimum.

Tactile, Kinesthetic and Multi Sensory Approaches:-

The tactile and ^Kkinesthetic learning channels can be used to assist children in their learning.

For example :

- (i) Students may be asked to identify objects in a cloth bag.
- (ii) Sand paper letters or numbers may be used to promote tactile and kinesthetic learning. This is to provide support for visual or auditory learning by using support of other sensory modalities. Tracing out letters or sometimes words on the arm or back of the student can also be helpful. The child may look at letter cards on his desk and tries to match one being traced on his back, or he may keep his eyes closed and concentrate on feeling the letter or word. These types of modalities can be used with Kindergarten and first grade children who show evidence of developmental and remedial needs in visual perceptual abilities required for reading and writing. These approaches are called VAKT (Visual Auditory - Kinesthetic- Tactile) approaches or Multi-Sensory approaches given by Fernald (1943).

Those who have developed a low self concept as a result of learning failures should not be subjected to any embarrassment or to emotionally loaded remarks such as how

important it is for the student to do well for his family. He should be given success experiences by letting him do things that he will be able to do. The teacher can devise many activities/games for facilitating language development some of which are:

- (i) Pictures with missing parts may be presented and have the students complete them.
- (ii) Provide the student with a grid of letters. Give him some words to find by circling the letters.
- (iii) Provide the students with one or two paragraphs with missing words.
- (iv) On field trips, point out objects and simultaneously name them. Explain the functions of objects or relationships. Have the student repeat them, if helps him to focus his attention.

For promoting arithmetic skills

- (i) Students should be provided with many experiences of putting together and taking apart concrete objects to familiarize them with the concepts of addition and subtraction.

(ii) When a student has made errors in computation, ask him to explain it. His explanation would provide him an insight into it. On a tiled floor, use each block as a unit of measure (one foot, one mile or one city block). Then construct a room, building, town etc.

(iii) Provide the student with scaled diagrams of the school, campus etc. Have him follow the map to get to specific locations. Give him directions without the diagrams and ask him to tell you where he will be if he follows them.

Provide real money or the closest possible replications and set up a store, amusement park or other business and have the students buy items and receive change. Older students can shop from advertisement in the newspaper. They can prepare budget, plan meals, purchase foods and buy clothes. This kind of exercise can also help children in inculcating many life-skills for managing their lives such as personal finance, budgeting income, making sensible purchases etc.

Cognitive training technique

This technique involves training students to monitor and modify their own cognitive strategies and is applicable from elementary grades through high school (Kagan, Pearson, Welch, 1966; Meichenbaum and Goodman 1971; and Finch et al; 1975). There can be a number of ways in which the teacher may assist students to monitor and improve their cognitive processes and strategies. However one is being given as an example. It is seen that ^{many} students have difficulty with academic tasks and respond impulsively to problem solving situations ignoring valuable clues that more reflective students use to good advantage. Here is one sequence given by Meichenbaum and Goodman (1971).

- (i). The teacher models the task to be learnt talking aloud while the student watches and listens.
- (ii) The student performs the task verbalizing (self-instructing) in a manner similar to that demonstrated by the teacher. The teacher assist as needed.
- (iii) The student performs the task, self instructing without assistance from teacher.

- (iv) The student performs the task, self instructing in a whisper.
- (v) The student performs the task thinking of the self-instruction that was verbalized.

The self instructional training can also involve self instructions such as "I have to try very hard to do it right" or "what must I look at before I decide the right answer." In addition the student may supply reinforcement by verbalizing statements such as "that was good - I got the right answer". This might be considered another type of multisensory approach to learning. The basic principle however involves helping the student to learn to closely monitor his own thinking strategies.

Improving Study Skills

Many learning disabled have poor study skills. Sheinker and Sheinker (1982) emphasize four major study skills for improving recall, understanding and generalization of materials learned. These skills are:

- skimming ability to determine what is more important.
- Summarizing ability to condense material.
- Note taking for giving basic information in a meaningful sequence.
- Outlining for organization of information.

The development of effective skills helps students learn more about how to take greater responsibility for their own learning.

Learning disability programmes at the elementary level are primarily remedial in nature and tend to focus on building the basic academic skills of reading, writing and arithmetic. At the secondary level emphasis involves accommodation or compensatory teaching (Marsh, Gearheart & Gearhart, 1978)

Here some elements of the total learning environment is modified to promote learning. It may be modification of course content, presentation of information, and of how the student is required to respond. For example

- those who have difficulty writing a report, an oral response or taped response may be permitted.
- students may be evaluated on understanding of content but not on writing skill.
- Peer tutors may be used in many ways.
- study skills classes may be organized to help the student adopt^a number of alternate ways to study and recall information.
- Other skills such as preparing for tests, taking notes etc. may be emphasized.

Teaching for Transition-Life Skills, Career and Vocational Education

Suggestions so far pertain to helping students overcome their difficulties in learning school subjects, it is

also important to prepare students for the transition from school to occupational and independent living environments (Mastropieri & Scruggs, 1987). Orientation of the student to the world of work and adult living should begin early in elementary school years and integrated into all aspects of school living. Identifying suitable work experience and socially useful productive work activities according to student needs, interests and ability is important more so in the case of learning disabled to enable them to use their positive attributes and abilities. It also pays dividends in terms of creating favourable attitudes towards all kinds of work, working hard, learning to work with others, to be able to follow directions, taking pride in one's accomplishments etc. Those who are not likely to pursue higher studies can be helped to choose suitable vocational courses. This will help develop many work related skills such as adjusting to job requirements, learning which of their disabilities or academic deficits may cause problems and how to circumvent these problems.

The school counsellors ^{whenever} available can provide educational and occupational information related to the interests and aptitudes of students and or the vocational courses they are studying. Information about various occupational alternatives available in their immediate geographical

area can be provided. It may be more practical to counsel students to enroll for training in areas that are less competitive. Attitudes of potential employers if possible can be evaluated, some employers may be willing to make certain allowances (e.g. low reading ability, slower rate of initial learning) in return for good work habits, positive attitudes etc.

Effective use of leisure time is also important in the development of the whole person. Reading for enjoyment through story books, magazines, newspapers etc should be promoted. This will improve vocabulary, give verbal fluency and improve reading speed. Students may be told about various social services or athletic organizations that exist in the community and other recreational facilities such as public parks, lakes, swimming pools and other athletic facilities.

Many related areas in the life skill curriculum include personal identity and value clarification, dealing with conflict and disappointment, dating and marriage, home repairs, buying and using medicines, voting and political activity and finding new friends. For organizing these activities the teacher should work in coordination with guidance and administrative personnel, parent and teacher organizations and community service personnel.

Meeting the challenge :

In India teachers and parents are largely ignorant of the learning disabilities in children. There is a need to create awareness through workshops, seminars and lectures to orient teachers, educational administrators and others about the nature of these disabilities and remedial and preventive measures that can be adopted. Mass media could also be utilized for the purpose.

Surveys have shown that teachers are ignorant of the processes of child development and have apathy towards adopting innovative approaches. Teaching done in primary school is ^{also} found to be dull and stereotyped.

It is therefore suggested that teachers' pre-service and in-service training programmes should have an input of basic knowledge regarding child psychology and child-centred approaches to teaching. Discussions on other educational issues such as right age of starting reading, writing, dropout rates and specific case problems may be taken up. This will equip the teachers to cater to specific learning needs of each child and help him overcome his learning deficits.

It is necessary to create a general atmosphere of awareness in schools about learning disabilities which will bring about better acceptance of these children and a more patient and positive attitude towards them by parents and teachers

Programmes to expose teachers to the innovative/creative ways of teaching to make learning a more joyful and participatory process for every child are the need of the hour.

References

- Adelman, H. and Taylor, L. Learning Problems and the Fernald Laboratory: Beyond the Fernald Techniques. Paper presented at World Conference of the Council for Exceptional Children, Stirling, Scotland, 1978.
- De Ruiter, J. & Wansart W. Psychology of Learning Disabilities, Rock Ville, Md: Aspen Publications, 1982.
- Fernald, G. Remedial Techniques in Basic School Subjects. New York: Mc Graw-Hill Co., 1943.
- Finch, A.J., Jr., et al. Modification of an Impulsive Cognitive Tempo in Emotionally Disturbed Boys. Journal of Abnormal Child Psychology, 1975, 3, 47-51.

Gearheart, B.R. & Weishahn, M.W. The Exceptional Student in the Regular Classroom. Times Mirror/Mosby-College Publishing. Missouri, U.S.A., 1984.

Kagan, J., Pearson, L. & Welch, I. Conceptual Impulsivity and Inductive Reasoning. Child Development, 1963, 37, 583-594.

Lynn, Roa. Learning Disabilities. Free Press, Collier Mc Millan Publishers, London 1979.

Marsh, G., Gearheart, C. & Gearheart, B. The learning Disabled Adolescent: Programme alternatives in the Secondary School, St. Louis : The C.V. Mosby Co., 1978.

Mastropieri, M.A. & Scruggs, T.E. Effective Instruction for Special Education. College Hill Press, Little Brown & Co. (Inc.), Boston, U.S.A. 1987.

Meichenbaum, D. & Goodman, J. Training Impulsive Children to Talk to Themselves; A Means of Developing Self Control. Journal of Abnormal Psychology, 1971, 77, 115-126.

Neely, Margery A. Counselling and Guidance Practices with Special Education Students. The Dosey Press, Homewood, Illinois, U.S.A. 1982.

Prasad, Bindu, Community Health Approach to Child Guidance Services. Child Guidance Centre, Dr. Zakir Hussain Memorial Welfare Society, Jamia Millia Islamia, New Delhi. 1986.

Reid, D., & Hreska, W.A. Cognitive Approach to Learning Disabilities. New York: McGraw-Hill Book Co., 1981.

Saunders, R.E. Questions and Answers about Dyslexia. Psychiatric Annals, 1977, 7, 461-463.

Sheinker, J., & Sheinker, A. Study Strategies: A Meta Cognitive Approach. Skimming, Note taking, Summarizing, Outlining (four handbooks). Rock Springs, Wyo: White Mountain Publishing Co., 1982.

Siegel, E. and Gold, R. Educating the learning disabled. New York: McMillan Co. 1982

Silver, L.B. The Minimal Brain Dysfunction Syndrome. In J. Noshpitz (Ed.). The Basic Handbook of Child Psychiatry (Vol.2). New York: Basic Book Inc., 1978.

Tarnopol, hester. Learning Disabilities, Introduction to Educational and Medical Management. Charles C. Thomas, Publisher, Springfield, Illinois, U.S.A. 1974.

Tec, L. The Fear of Success. New York : The Readers Digest Press, 1976

TITLE OF PAPER : HOME WORK - IMPLICATIONS IN TEACHING AND
LEARNING PROCESS

B. Phalachandra

" By Education I mean allround drawing out
of the best in Child and Man - BODY, MIND
and SPIRIT " - Mahatma Gandhi.

We are living in a world where everything is moving in a neck break speed. The future problems of the Society are more or less clear on the horizon. It is necessary for the educationists to come under one shelter and consciously plan out a workable, life-related and future-oriented education needed for the child, our "Future Hope". Child-centred-education is almost the call of all the nations today in this direction, it is necessary for us to help the child to become a student, a mature independent learner of his exciting challanging future to make him shoulder the future responsibilities with strong determination and optimism. Developing such a positive outlook and optimism in the child will go a long-way in taking our country towards progress and enlightenment. Providing rich, multifarious and multifaceted experiences of life, making him read the book "Society", in an accepted legislature "School" is the responsibility of the teaching community. The educational

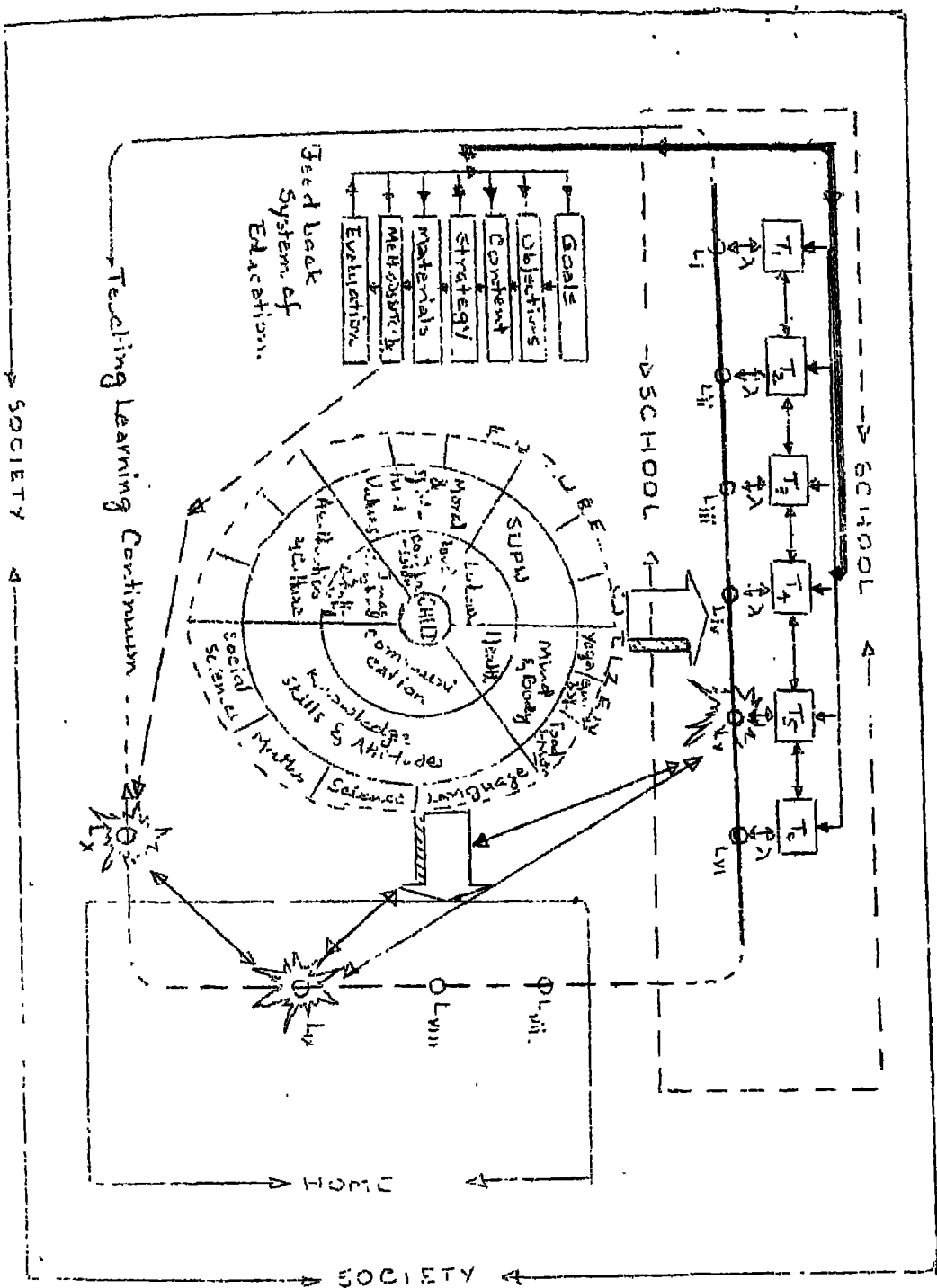
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experience that the child receives should be meaningful, pleasant and memorable which can be carried throughout his life.

The child must learn for himself. He must respond and do the work. The teacher can only assist by managing, guiding, encouraging, reinforcing and by providing information. The efficiency of learning is dominated by the child's home work. Homework is an integral part of the class room teaching. There is no common agreement among educationists, teachers and parents about the meaning and usefulness of Home Work. Yet, it has continued to live in the Teaching-Learning Experience (TLE).

The present paper illustrates with the help of a model, the place and effectiveness of Home Work (HW) in child-centred education. The model (enclosed), which is self-explanatory, illustrates

- a. the link between teaching community and the complete feedback system of education
- b. the child, the king-pin of the Teaching-Learning Process, interacting with the teachers in the school enriches his knowledge which ultimately contributes to the development of his total personality.
- c. home work establishing link among different learning situations that are taking place within the class room, and outside the class room - in home and society.
- d. home work and its position in the feedback system of education.



Home Work in Teaching-Learning. Froese

- key?!
- i) $T_1 - T_2 = T_{\text{cell}}$ e's
 - ii) $\lambda = \text{wavelength}$
 - iii) $\text{Li-Lx} = \text{learning situations}$

Home work is an experience linked with school, Home and Society. It facilitates in drawing out of the best from the child - an independent learner.

There are two schools of thought, one advocating the inclusion of homework as a part of school activity and another opposing it. It is better for us to see their views with respect to various aspects related to homework like the type and frequency, purpose, attitude, time spent, help taken etc. As we see in the present model, the people involved in the activity called 'Homework' are Educational Psychologists, Teachers, Parents and Students. Let us take a look at their stand point one by one.

Educational Psychologists : For them the home work is an essential activity to make a child develop some qualities like self-reliance, independence to organise time, to improve study skills and to make use of leisure time more effectively. So the Homework should not lay heavy premium on acquiring knowledge and skills at the cost of other aspects of child's allround development viz. physical, social and emotional. The home work should be pleasant and memorable experience for the child, an experience which will help child develop a positive attitude and liking for the subject. It should be ability based.

But the present scene is such that the extra load (quantum) of home work reduces the energy and vigour with which the child faces the next day's school work. The teachers assign bothersome

task (type) instead of interesting and creative assignments. Children are tired after six hours of schools, which leaves little time to pursue their hobbies and other recreational activities. The type and quantum of home work is the same for all children, irrespective of whether or not the child is a) capable of doing; b) from congenial home environment; or c) has sufficient time to do the work, etc.

Teacher : From a teacher's point of view, home work is a tool to see the outcome of his teaching. An exercise to see the occurrence of learning through feedback. Some consider it as a preparation for the next class. For many, homework is a drilling exercise. Bond Archsmith (1966) found home work to be more of drilling exercises. A few believe in giving home work so as to improve the academic achievement, this belief is confirmed by many studies like that of Goldstein (1960). He examined articles on homework for 30 years before 1958. The majority of the article suggest that regularly assigned homework contributes to better academic achievement; Haugen's (1977) study found that the homework group performed significantly better than non home work group on standardized tests.

Thus, the homework is used by teachers as a means to assess progress made, and to find out whether children have understood what has been taught or not - to achieve wider end result.

Many teachers don't like giving the Homework to the students, as they believe that

- a. It is an extra-burden to give and to do the correction. They are already burdened with a load of 28 periods per week, which works out to 5 periods out of 7 periods a day. Where is the time to prepare for the class; let alone thinking of assigning homework. This is revealed in the studies of Hiregange (1966), N.R. Kulkarni (1973) and Naik (1978).
- b. Normally the strength of classroom is ranging from 50 to 60 students. How much time will it take just to open an exercise book, look at it and correct, make remarks, and put signature?. A teacher may be going to 4 to 5 sections, no time is available for the preparation for the class.
- c. Administrators expect the teacher to cover the syllabus and help the school to achieve good results. Few administrators consider the results as the index of teacher efficiency.
- d. Giving homework encourages copying habit of students, as they are neither in a position to do on their own nor get the help from their parents (illiterate). Not doing homework results in punishment.
- e. If every teacher gives homework, where is the time for the child to complete?.

Students: Among students also there is a mixed feeling about the Homework. Students, who are willing to do homework, give varied reasons. Some of ^{the} reasons are :

- a. it is an act of obeying the teacher;
- b. it is a preparation for examination;
- c. it requires less help in the case of high achievers and they have better resources;
- d. it results in motivation to do better in the classroom as it helps in getting recognition;
- c. it is done to avoid punishment at the hands of teachers in school and the parents at home;

A few studies have thrown sufficient light on these reasons. Of them, the study carried out by Jyothi (1985) reveals that high achievers have a more favourable attitude towards homework and they take less time to do the task assigned. Hiregange, Kulkarni and Naik reveal that majority of students preferred homework daily.

However, an equally good number of students would not like to do homework, if the choice is left to them. Some of the reasons generally mentioned are

- a. it is an unpleasant experience students face at school and home;
- b. homework is a monotonous and mechanical activity;
- c. non-availability of time at home as time is spent on household work.

- d. inability to do the homework, non-availability of help from parents, siblings etc.;
- e. it is used by some teachers as a means of giving punishment;
- f. it is quantum and frequency is beyond students' capacities.
- g. teachers show laxity on their part in correcting homework.
- h. students have to curtail their leisure time activities.

In addition to the above, Hiregange, Kulkarni and Naik's studies revealed that a) Homework books were not regularly checked; b) the cause for neglect of homework on the part of students was heavy and tough homework, heavy domestic work and want of time. An NCERT survey revealed that on an average 4 hrs/day is spent by IX standard students in doing their homework.

The question arises, what should be done to make Homework a pleasant, memorable experience for the child and acceptable to parents and teachers. Some of the suggestions in this direction are :-

1. Even though much has been said for and against Homework in teaching-learning process, there is still a need for concerted research effort to arrive at many of the important decisions related to issues and effectiveness of Homework in teaching learning process. Identifying the promoters and constraints

of homework and developing guidelines to derive the maximum benefit from such meaningful experience with regard to frequency, length, stages, types etc., requires indepth study. Only the emperical based research evidences in this area would help us to comeout with reasonably fair and concrete suggestions to influence the prevailing practices. Whatever we may do ultimately, it should go with the interest and in the interest of the child. Our primary concern is to make the child develop a love for learning and to help him enjoy the educational experience.

2. Homework should be need-based and according to the level of the child and hence flexible.
3. Homework should attempt to create a habit for learning and retaining learnt material for a longer period.
4. Homework should be a group activity., each members doing a particular aspect of an assignment, depending up on his ability, interest and resources.
5. Homework should be properly scheduled and distributed through out the course.
6. Adequate guidance should be provided to the students before assigning the homework.
7. Before giving assignment teacher should judge difficulty, length and its appropriateness.

8. Assignments should be made as frequently as possible, consistent with the class periods and subject matter.
9. Completed assignments should be graded and returned for reinforcement and feedback.
10. Giving some weightage (say about 5% in the total assessment for the Homework in the final grading may be tried.
11. The level of difficulty should gradually increase within a course period.
12. Correcting copies of few children, and in turn asking them to correct others will save time for the teachers (in rotation).
13. Following Lee and Pruitts (1979), four types of items may be included to get maximum benefits.
 - a. Practice :- designed to drill, reinforce skills and information covered in the class
 - b. Preparation:- to prepare students for subsequent lessons.
 - c. Extension :- Provided to ascertain if a student can extend the concept or skill learned in the class.
 - d. Creative :- designed to require students to integrate many skills and concepts in producing some Project.
14. Some format (just as a model to begin with) with regard to the type, length etc. of homework may be prepared and circulated to all the schools catering to the needs of children coming from Literate/Illiterate families, Urban/Rural,

High/Low achievers and attending Government/Private/Public Schools.

Homework is really a meaningful and useful educational experience which would supplement the classroom learning, if properly understood, skillfully planned, intelligently assigned and efficiently guided.

TITLE OF THE PAPER: MASTERY LEARNING AND CRITERION REFERENCED
TESTING IN CHILD CENTRED EDUCATION

PRITAM SINGH *

National Education Policy¹ (1986) and the corresponding Programme of Action² has emphasized in article 8.23, the need for development of system of Continuous Comprehensive Evaluation to the extent that it replaces the existing system of external examination. This is possible only when we believe that teachers' assessments are more valid and reliable measure of pupils' growth and development. It provides the basis for more democratic mode of evaluating the child, thereby recognising a clear shift from authoritarian approach of evaluating students by single shot examination conducted by single paper setter to that of evaluating a student by one who teaches him and carries on enroute continuous evaluation. It provides more scope for diagnosing weaker children and undertake remedial measures to fill up gaps or inadequacies in their learning.

1. Learner based content and process

Individualised instruction, learner based methodologies of teaching and learning, emphasising diagnostic evaluation, remedial teaching, self-evaluation and using evaluation as feedback, are some of the many more innovative child centred practices recommended for use in the teaching learning process. Likewise child centred curriculum,³ differentiated content of teaching, heuristic or learner dominated methodologies of teaching, individualised assignments and projects, self-paced unit testing and self-referenced judgements are all child centred

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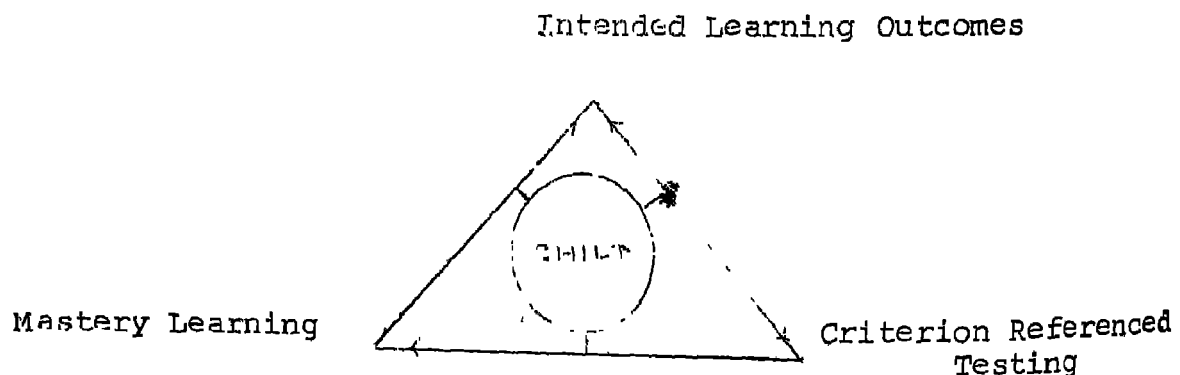
foci which aim at maximum development of the child. This requires an altogether different approach to teaching and testing as well as judgement making. Three basic purposes of this approach are

- a. to maximise/optimize the development of the child to convert his potentialities into actualities.
- b. to maximise the mastery level of attainment of all the children.
- c. to improve students' level of achievement through regular diagnosis followed by remediation.

Three components involved in this child centred approach are

- (i) Cognizance of intended learning outcomes (I.L.Os)
- (ii) Use of mastery learning strategies⁴ (M.L.S), and
- (iii) Application of Criterion-referenced approach to testing (C.R.T.)

Relationship among the three components with child as the centre can be depicted as under :



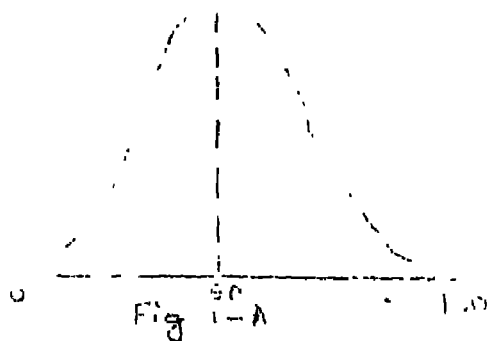
2. The Paradigm

- a) Intended learning outcomes represent the criteria or the indicators against which the evidences of growth and development of the child can be estimated or judged. Each of the I.L.O. represents the end-product of learning of a concept at a particular level like knowledge, understanding, application, skill or attitude. Unless there is a logical contingency between the concept and the corresponding I.L.Os teaching learning strategies cannot be dovetailed to those I.L.Os for attaining mastery of those concepts. Therefore, (a) formulate and specify clearly the intended learning outcomes for each unit of learning.
- (b) Before taking up the T.L. strategies (T.L.S.) it would be necessary to assess pre-requisite behaviours mastery of which is considered necessary before taking up developmental teaching for the pre-determined I.L.Os.⁵
- (c) In case pre-requisite learning (Knowledge, Skills etc.) are adequate objective based (I.L.O. based) teaching learning may start. But in case of inadequacy, remedial instruction for those pre-requisite learning will be undertaken and re-tested for adequacy, followed by usual teaching.
- (d) Developmental teaching follows the testing of pre-requisite learning (if adequate). This is objective based or criterion referenced teaching (I.L.O. based),

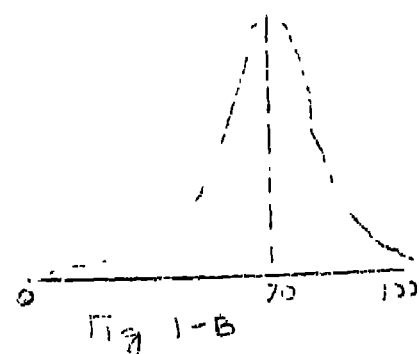
- (e) Post-instruction testing for assessment of attainment of I.L.Os to identify those who have mastered and those who have not.
- (f) Use appropriate remedial measures to make up deficiencies of the non-masters.
- (g) To retest and see if they have become masters. If not, further correctives are applied till they become masters as evidenced by retesting in terms of I.L.Os.

In contrast to norm-referenced approach which aims at measurement of students' learning, the criterion-referenced approach aims at improvement of students' learning through regular diagnosis followed by remediation and retesting till the child becomes master. Unlike norm-referenced tests which seek normal distribution of scores of students, the C.R. tests seek skewed curve of distribution of scores where majority of the children are expected to attain 70 to 80% marks as depicted below⁶ :

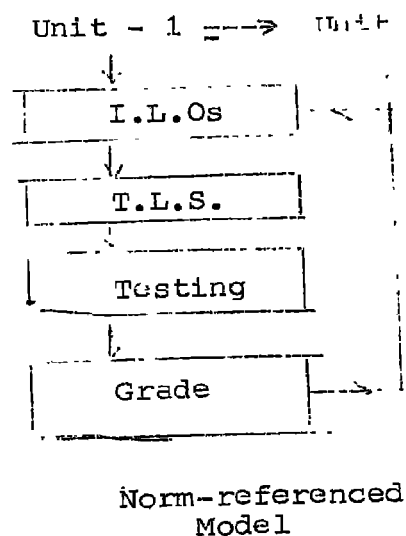
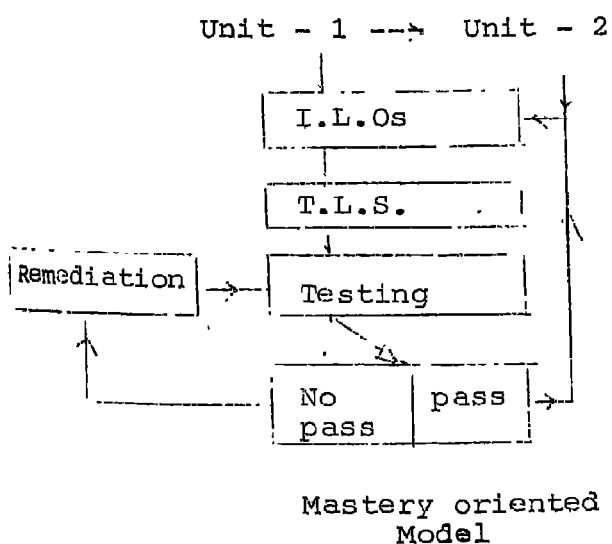
Norm-referenced



Criterion-referenced



This skewed curve of attainment (Figure 1-B) is possible only through mastery learning approach which rests on the assumptions that gives the appropriate learning experiences and the time needed for learning almost all students (95%) can attain the same level of attainment as at present is reached by the upper 20 to 25% of bright students. "Concern is for reaching the optimum-minimum by maximum number of students rather than attainment of maximum by a minimum".⁷ In other words, if 90 to 95% of the students achieve the I.L.Os it means the teaching is successful. If only 10 to 20% get A-Grade and majority get C Grade as in case of N.P.C. (Figure-A) it reflects poor instructional efforts. Therefore, mastery learning strategies have to be adopted that help majority of the students to reach high level of achievement considered as A-Grade or mastery level. However, this is possible only when mastery oriented strategy, criterion-referenced teaching model is used in contrast to traditional norm-referenced model as depicted below⁸:-



3. BASES

(a) Philosophical Basis

Mastery learning strategies are based on the fundamental belief that every child has the potentiality of attaining the desired level of excellence provided he is given the appropriate instruction to develop his potentialities into actualities. If 95% children can attain the intended level of achievement as supported by researches of Bloom, Block, Anderson and Hambleton⁹ use of mastery learning approach to teaching and teaching is the underlying assumption. Concern for under-achievers and their development through appropriate remedial measures forms the basis on which both mastery learning and mastery testing are based. To believe in the equality of the individual and his potentiality to reach the optimum learning vis-a-vis testing for mastery are bases of this philosophy.

Thus focus is here on improvement of child's achievement rather than on grading his achievement. Criterion-referenced testing is a means of setting standards in terms of acceptable I.L.Os, mastery learning strategies aim at maintaining those standards set in the form of intended outcomes of learning and ensuring that atleast 70 to 75% of students attaining the desired level of performance. Firm belief in the capacity of the child, impact of mastery learning strategies to maximise his

development and the use of criterion-referenced approach to testing are the three pillars on which philosophy of mastery learning and child centred education is based.

(b) Sociological Basis

Mastery learning approach to teaching and testing highlights the need for equality of learning opportunities for all students. In fact, it is democratic approach which requires the teaching-learning strategies to be adopted to the needs of the individual child who should be given instruction the way he is capable of attaining the maximum.

If required, more time has to be given to certain students as compared to others. The right of the poor section of students for additional help is recognised under this approach. The focus is on bringing such students to a minimum acceptable level by improving their learning.

Approach is indeed socialistic in that it aims at bringing most of the students (75% or more) to the same standard of performance as expected in the pre-determined intended learning outcomes related to the learning unit to attain the expected level of mastery. The concern is for making almost all the students as masters by bringing non-masters to the intended level of mastery by helping them in various ways. That is why it is desirable to have only two point rating or grading for classification of students, those who are masters and those who are non-masters. Treating all individuals alike in terms of their potentials,

helping them to become masters, by suitable remedial programme and attempting to minimize the variance in the attainment level of the learners, are teachers reflecting concern for equity.

(c) Psychological Basis

A fundamental assumption of mastery level is the cultivation of faith in teachers who can provide the needed instructional setting and learning milieu in which all students given the needed inputs can do as well as the top 20% of students at present. It is a psychological fact that all students do not learn by the same method. They require different methodologies of teaching and learning. They have different styles of learning¹⁰ and, therefore, it is necessary that emphasis of mastery learning is on diagnosis of gaps in learning on the basis of which remedial measures are adopted. Students are not graded on hundred point or five point scales whereby they are dubbed as poor, deviants, under achievers or failures. They are graded only as masters and even non-masters are to be graded as masters after giving them more time to learn and applying the needed correctives. Sense of achievement, sense of success and sense of equality are cultivated through this approach whereby the children develop positive self-concept which, in turn, becomes a motivating force for students to improve their learning. Thus mastery learning and C.R. testing are used to improve

learners' achievements by providing the needed motivation, individual attention, remediation and positive view of themselves.

(d) Scientific Basis

Validity and reliability are two basic criteria of validating teaching and testing. Clear-cut formulation of intended learning outcomes corresponding to each concept provides the direction for both teaching and testing. Construction of items which are congruent with each intended learning outcome and the concept they imply, is another factor contributing to improve validity. With the ensuring of coverage of all concepts and I.L.Os and the increase in number of items to test each I.L.O. automatically takes care of logical and content-validity as well as of reliability.

Facility indices of the items are taken as reflection on the instructional effort rather than difficulty level of the item as such. In other words, high facility indices say 90 and above indicate better instructional efforts on the part of teachers that enabled children to achieve higher level of mastery rather than reflecting on the poor quality of test item having a low item difficulty level. Likewise, higher discrimination indices of the items are not appreciated as a quality of the item discrimination as we do in norm-referenced testing. On the other hand, we

interpret it as the recognition of more gap between the masters and non-masters. Focus of mastery learning approach is on minimizing and the variance, the gap between the masters and the non-masters thereby leading to a low discrimination indices. Accordingly, we expect positively skewed curve of achievement in which majority of the students score 75% or more marks as contrasted with the normal probability curve which we expect in case of norm-referenced measures. Similarly, judgments made are also either self-referenced whereby, individual's progress is compared with his own previous achievement or it is criterion-referenced in which judgments are made in terms of attainment on various pre-determined intended learning outcomes relating to various concepts.

(e) Pedagogical Basis

It is believed that if the same instruction is given to a large number of students there is a high correlation between the aptitude and the achievement. Aptitude tests being predictors of achievement, it has led to the erroneous belief that high achievement can be expected only from students having high aptitude. However, as pointed out earlier it is only a function of the time allowed for learning and the time taken for learning. Thus, aptitude is defined as the amount of learning and time taken by a learner to attain a mastery task. Mastery learning approach envisages the use of methods and materials which help to

attain the mastery in a short time. Some students take more time than others.

Likewise, quality of instruction is defined as the degree to which learning episodes are organised to achieve optimum in a given time. Ability to understand instruction is determined largely by the verbal ability and reading comprehension. These two measures are highly co-related with achievement. If methods are used to enhance such ability like the individualised study, use of alternative, resources of teaching and learning, application of proper diagnosis followed by appropriate correctives etc. are considered relevant for improving the ability to understand instruction.

Another variable is the perseverance which may be defined as the time a student is willing to spend in learning. All mastery learning strategies demand that the student should be willing to spend time he needs to master a given task. Successful learning experiences, frequent rewards and regular feedback increase perseverance. The idea is that we have to find ways to provide the time needed for each learner to attain mastery. Improving the learner's ability to understand instruction, quality of instruction and his aptitude go a long way in reducing the learning time of the child.

Therefore, teaching for mastery and mastery testing go together. Adaptation of teaching-learning strategies is

basic to achieve mastery goals. Inter-relationship of intended learning outcomes, mastery learning strategies, time factor and criterion-referenced testing are the focus and indeed the bases for improving students' learning and validating the teaching-learning process.

4. Implications of Criterion Referenced Testing

As discussed in the earlier pages, the emphasis on mastery learning strategies vis-a-vis criterion referenced testing lies in the belief that every child can achieve the same level of achievement as the bright ones are capable of provided he is allowed to learn the way he can learn most efficiently. At the same time, focus of C.R. measurement is on diagnosing inadequacies in student's learning and providing basis for remedial instruction. Place of criterion-referenced testing in the teaching-learning process can be better appreciated if we are cognizant of the implications of C.R. testing, as given below:¹¹

(i) Focus on Intended-Learning Outcomes

Criterion-referenced tests are developed on the basis of pre-determined criterion behaviours which are identified as intended learning outcomes. These outcomes when stated in measurable terms and in hierarchical, sequential or developmental order become the basis for teaching-learning strategies as well as evaluation. C.R. tests help to

validate these specific instructional objectives, formulated in the form of intended learning outcomes. Analysis of students' scores can indeed throw light not only on the sequence of these expected outcomes of learning but also on the efficiency of these objectives.

(b) Growth Oriented Strategy

Focus on mastery learning and mastery testing is on discovering the inadequacies in students' learning and the causes of these inadequacies. This leads to special demands on the teachers to take special care of the weak students by providing remedial measures that can help to reach the desired level of mastery which now at present is achieved hardly by 20% to 25% of the students. Thus, focus is on improvement of students' achievement by helping them to learn to the maximum level rather than comparing students and labelling them as under-achievers or deviants. Concept of criterion-referenced testing is a positive move towards identifying the area of learning deficiencies and deliberately applying the needed correctives for proper development and growth of the learner.

(c) Democratic Approach to Testing

It hardly needs any mention that two concepts rooted in the C.R.T. are the uniqueness of the individual and his capacity to reach the same level of learning as any good student is capable of. It believes in the equality of learning as well as equality of opportunity to be provided

to different groups of students to bring them at par with brighter students. The objective of 80% of marks is indeed very socialistic in approach in contrast to non-referenced approach which emphasizes comparison, discrimination and deviances. The mastery approach to teaching and testing believes in the uplift of the weaker section of students and their classless grading on their achievement.

(d) Diagnostic Focus

Self-paced learning is an accepted proposition which requires the use of tests to different groups at different times so that inadequacies in their learning, especially of the weaker section of the students, are discovered.¹² The very purpose of this approach is to diagnose the causes of low achievement followed by application of needed correctives and re-testing to see if the intended mastery level is obtained.

(e) Validating Domain Elements

Grading and sequencing of concepts is basis for effective learning and proper grading of concepts is pre-requisite to instructional programme. Working out the hierarchy and complexity of concepts precedes the construction of criterion referenced tests. However, empirically criterion referenced tests help to establish this sequence and complexity of concepts when results are analysed. Mastery of different concepts is reflected by continuous use of criterion referenced measures which

ultimately would lead to better placement of concepts different grade levels.

(f) Sound Judgements and Better Decisions

It is quite evident that an individual's performance has to be self-referenced in terms of his own rate of progress and this helps the teacher to report to parents in terms of what he knows well and what he knows not, as reflected in formative evaluation. However, post-instructional testing for mastery of a learning unit forms the basis for mastery judgement which indicate thereby the level of attainment on various concepts. The mastery judgement, and not the deviation judgement is the focus of criterion referenced approach to measurement.

(g) Emphasis on Self-evaluation

Tenbrink says "Ultimate aim of all evaluation is self evaluation."¹³ Criterion referenced testing promotes self-evaluation because the test is on measurement of specified learning outcomes in terms of what has been learnt and what is still to be learnt. Knowledge of inadequacies in learning motivates the learner to make up the deficiencies. Continuous feedback of adequacies in their learning motivates them for further learning which ultimately leads to the development of positive self-concept among the students and provides basis for self-evaluation that leads to self-improvement.

(h) Validation of Curriculum

Development and use of criterion-referenced tests and mastery learning approaches put a number of demands on the framers of the new curricula.¹⁴ For example, analysis of prescribed curricula in terms of sequential learning of the units to be arranged in order of their complexity developmental teaching to emphasise the structure of the subject in the form of major concepts etc. are some of the pre-requisites. Formulation of unitwise objectives follow by specification of domain objectives corresponding to the various concepts or the sub-concepts need to be listed. Based on content specification and specified domain objectives it would, indeed be possible to revise teaching-learning strategies that should be learner based rather than group based.

5. To Conclude

Implementation of mastery learning and criterion referenced approach to teaching and testing is very difficult task but at the same time is very crucial indeed. Since training of teachers and teachers educators is a pre-requisite literature in this field especially in the Indian context need to be developed. Immediate efforts have to be made at the NCERT, SCERT and Guidance Bureaus level to produce literature for the teachers and evaluators. The sooner we recommend the use of mastery level strategies and criterion-referenced testing in classroom teaching and testing the better it would be from the point of view of the student learning and for improvement of their standards of education.

SELECTED REFERENCES

1. MINISTRY OF HRD, Deptt. of Education. National Policy on Education, 1986 (M/o H.R.D., Govt. of India, New Delhi)
2. MINISTRY OF HRD, Deptt. of Education, National Policy on Education, 1986. Programme of Action, 1988 (M/o HRD, Govt. of India, New Delhi)
3. N.C.E.R.T. National Curriculum for Elementary and Secondary Education - A Frame work (Revised Edition) NCERT New Delhi, 1988
4. Singh, Pritam, et al, Criterion Referenced Tests, Environmental Studies for Class III, ERIC Project NCERT New Delhi, 1987
5. Singh, Pritam, Evaluating Students in Elementary School Theory into Practice, 1982, NCERT, New Delhi.
6. Block, James H., Anderson Lorin W. Mastery Learning in Classroom Instruction, Macmillan Publishing Co. Inc. London 1975.
7. Mathur, R.N. Individually Guided System of Instruction, NCERT, 1983
8. Scannel, Dale, P. & Tracy, D.B. Testing and Measurement in the Classroom. Houghton Mifflin Company, Boston, 1975.
9. Hambleton, R.K. & Novick, M.R. Toward in Integration of Theory and Method for Criterion Referenced Tests. Act Research Report No.53, Iowa City, Iowa : The American College Testing Program, 1972.
10. C.E.R.I. Styles of Curriculum Development Organisation for Economic Cooperation and Development, 1972.
11. Singh, Pritam, Criterion Referenced Testing - A Monograph NCERT, 1983.
12. Singh Pritam, Diagnostic Evaluation and Remediation, NCERT 1985.
13. Tenbrink, Terry D. Evaluation - A Practical Guide for Teachers. McGraw Hill Book Company, New York, 1974.
14. Popham, W.J. Criterion Referenced and Remediation, NCERT, Jersey, Prentice Hall Inc. 1975.
15. Dockrell, W.B. Black, H.D. Criterion-referenced Assessment in the Classroom, Scottish Council for Research in Education, Edinburgh, U.K. 1984.

TITLE OF PAPER: PSYCHOLOGICAL AND OTHER WELFARE SERVICES TO
MEET THE NEEDS OF DISADVANTAGED CHILDREN WITH
SPECIAL REFERENCE TO FIRST GENERATION LEARNERS.

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Human civilisation shows that right from the beginning, human civilisation as in India, Greece and elsewhere was based on social inequalities and injustice. Society was ^{divided} ~~into~~ ^{under} people of high and low status, privileged and /privileged classes.

In India social inequalities got consolidated in the form of the caste system. The higher caste enjoys more rights and the lower castes had to fulfil more demands and in this sense the higher castes were socially advantaged as compared to the lower castes which invariably led an existence of oppression and poverty.

Concern with uneven and inequitable development has highlighted the issue of social disadvantage. An analytic view of social disadvantage yields several indices of disadvantage. Among these are the well known indices of poverty, rural residence, low caste, female sex, economic state of the community, lower level occupation, locality to which people belong, physical disability, low parental education and first generation learners.

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Along with property, wealth and genetic characteristics, people inherit educational, social and economic status from their parents. The economic levels, occupational status and educational levels of the people are significantly determined by their father's and in some cases by their grand fathers economic, educational and occupational status. Further, education works as a major tool of transmission of socio-economic status from one generation to the other.

It is believed that social disadvantage adversely affects intelligence and academic achievement through a deeply rooted psychological process which makes the disadvantaged incapable of coping with day-to-day tasks of achieving and making progress in life.

Social class is an important variable which determines a specific level of cognitive experience for the child. It determines the probability that the child will encounter certain types of experiences. The importance of mother upon children's early learning and education can never be ignored. Mother can be viewed as a teacher, as a programmer of input, during the preschool years. Mothers from different social class levels will programme the cognitive behaviour of their children in different ways (Hess & Shipman 1968). Bruner (1961) believes that the disadvantaged child lacks both the richness of the environment for developing models and

strategies of thought and the correct feed back necessary for their maintenance. Interaction between mother and child makes the basic structure of child's cognitive component. Among other things, it also influences child's early school achievement. Researches have shown a concrete impact of maternal behaviour upon child's social, psychological development. Children of the deprived sections of our society are not only exposed to a deficient array of cognitive experiences of the external world but are also exposed to mothers who are deficient in communicating to them in a better way. Such children, thus, face another kind of deprivation—deprivation of a mother who could satisfy their enquiring mind.

Education is perceived as one of the most promising means of all in evading the shortcomings and handicaps due to social disadvantage. Eradiction of illiteracy is accepted as an essential goal of national development.

Many of the socially disadvantaged groups are characterised by a low level of education and preponderance of illiterates. Another obvious reason for emphasis on education for the disadvantaged groups is the realisation that realities such as caste and sex cannot be changed. Poverty and rural residence are also difficult to change to any appreciable extent, education can be introduced and may be used as a means

to mitigate the effects of other factors of social disadvantage. The disadvantaged population has been persuaded to some extent to look up to education as a means of ^{improving} their social as well as their financial status. Hence massive literacy drives to hasten the process of educating the uneducated who are also the disadvantaged. It is strongly believed, for example, that caste prejudices will be reduced if people are well educated. A similar expectation regarding sex discrimination being negatively affected by education is also voiced frequently. However, the facts of the current situation do not leave much scope for such generalised effects of education.

The need for better education is widely accepted and along with other developmental efforts, education has occupied the minds of the planners and social workers alike.

The need for a vivid effective renewal of our democratic commitment to educate all children, both advantaged and disadvantaged, to their fullest social and intellectual potential, is most felt in modern society. Where as the advantaged child enjoys many opportunities for educational development, the disadvantaged child poses a challenge to educators. Current educational reforms are attempting to meet this challenge.

It is now widely accepted that more than 80% of mental development takes place by the age of 8. The preschool years are therefore vitally important from the education point of view. The disadvantaged child whose cognitive abilities are not fully developed is usually unable to meet the challenge of school and to take full advantage of the educational facilities offered at a later stage. On the otherhand, early environmental stimulation helps the child to achieve his full mental potential. Attempts to reduce in qualities in educational opportunities must, therefore, begin early if they are to have any impact. Adequate attention at this stage may also help to reduce the problem of wastage and stagnation in the early years of schooling by preparing the child for better adjustment in the school situation.

Early childhood is also a crucial stage for the emotional development. The provision of an atmosphere of warmth, love and security is essential to foster the emotional growth and to direct it appropriately. The importance of educating parents and families towards an awareness of their responsibilities and functions towards the schooling of the child cannot be over-emphasized.

Attitudes, habits and values which may endure for a life time are likely to be formed at this stage of life, and are even less susceptible to later change than intellectual process. It is, therefore, essential to provide directed activities, suitable companionship and timely guidance to the preschool-child to assist the process of socialisation and the formation of proper habits, attitudes and values.

All the above considerations highlight the need and significance of a programme of comprehensive attention to the preschool child which is implied by the term 'development' of the preschool child.

While it is essential to pay adequate attention to the development of all preschool children, the need becomes extremely urgent and compelling in respect of those from the disadvantaged sections of the community who are subjected to the greatest socio-economic deprivations

Among the innumerable problems of educating the children of the uneducated the so called first generation learners deserves greater attention. While schooling of all socially disadvantaged children poses enormous difficulties, it is felt that educating the children of the illiterate parents would be even more difficult. Some investigations in this context were made in the form of comparative study of the

First Generation Learners and Non First Generation Learners both at the school entry stage (Mehta and Saraswat 1981) and at the school leaving stage.

Mehta and Saraswat (1984), took up the studies of first generation learners with a view to determin^{ing} the extent to which this particular handicap of lack of parental education adversely affects the educational and vocational development^{and} if possible to identify the process through which this effect is mediated. Understanding of the mediating processes, it is hoped, would provide directions for intervention and remedial programmes. Among the important findings are the presence of significant differences on cognitive and achievement variables in favour of the non first generation learners thereby confirming the general impression that first generation learners are at a disadvantage regarding their cognitive abilities and achievement at schools. These differences were observed inspite of the fact that first generation learners and non first generation learners samples were taken from the same schools, implying the existence of common school and neighbourhood situation for first generation learners and non first generation learners. Some evidence of teacher's prejudices mediated by caste awareness was available from the first grade sample study with the rural and semi-urban samples. The differences on the teacher-assigned variables unfavourable to

the first generation learners found in the semi-rural area, but not in the urban area, appear to be due to the greater awareness^{of caste} in the semi-rural and rural schools as compared to the urban schools.

What is the process by which the school awareness^{of} pupils' caste adversely affects the marks and the ratings on personality characteristics assigned by the teacher? The most obvious interpretation is that the adverse marking and rating is mediated by caste prejudices harboured by the teachers, either wittingly or unwittingly and that the semi-rural and rural first generation learners are not actually inferior in their personality development anymore than are their counterparts. However another interpretation is more plausible, viz., that a self-fulfilling prophecy (Merton, 1984) has been operating here. Rosenthal and Jacobson (1968) have documented the impact of expectancies on performance through what has come to be known as the "Pygmalion effect". The caste prejudices of the teachers in the semi-rural and rural areas may have been subtly conveyed to the pupils in the form of a low level of expectation for those who were disadvantaged as regards caste, possibly in the form of neglecting or rejecting behaviour. The negative feedback may have led to the development of a negative self-concept in the caste-disadvantaged children,

resulting in their conforming to the teacher's expectations through actually poor academic performance and general behaviour. This, in turn, would strengthen the teacher's negative perceptions and attitudes towards the child. Thus we believe that the semi-rural and rural first generation learners have been locked into the vicious circle of this self-fulfilling prophecy.

The impact of deprivation upon various dimensions of psychological and educational development of disadvantaged children occupies the focus of attention. Education is the most important ladder of social mobility. It offers a possibility for the socially disadvantaged child to achieve a better status than his parents.

The high incidence of poverty and illiteracy in India has led to a high incidence of first generation learners in the primary classes in schools. These numbers are bound to increase because of the national policy of universalising elementary education. This group of pupils has always been assumed to be disadvantaged, and the disadvantage has been assumed to stem from the parents' illiteracy, but researches to support these assumptions have been lacking. Few studies have included parental educational level as one of the variables, but they have treated it in terms of number of years of schooling. Even in our own country where the

phenomenon of First Generation Learners is so widespread, very little research has been done on this group. A thorough search revealed only few studies. These are Solanky (1966), Shanmugam (1979), Malik (1980), Sinha and Misra (1982), Pushpa (1980), Mehta and Saraswat (1981, 84), ^{and} Singh (1979, 80, 83).

Studies conducted by the above Researchers on the problems of first generation learners have indicated some interesting and insightful results about the motivational consequences of social disadvantage. The preliminary findings have shown that the first generation learner's interaction with university was characterised with a variety of problems. They perceived the environment less positively and faced difficulties in dealing with demands of university life. Their affective reactions were negative and the coping strategies were largely non-task oriented. They were more externally controlled. Also they had greater degree of concern with avoidance of disapproval.

Social deprivation has significant retarding consequences for cognitive functioning. It was also found that deprivation experienced by the individual in various areas of life retards the growth of cognitive styles and abilities. Singh (1978, 1982) concluded that greater is the degree of social disadvantage, lower is the intelligence

and more inferior is the achievement. The academic achievement is influenced not only by intelligence but by several other factors, most important of which is the parental support he receives for his education. Coleman et al (1965), Peaker (1967) and Morrisson and McIntyre (1971) suggested that the role of the family is more important than the role of the school. The children of parents who take interest in their studies, participate in educational activities, have higher educational and occupational aspirations, do better in the studies than the children of parents who lack these qualities. More than this, the parental support compensates for a certain loss of intelligence.

Indian studies on disadvantage suggest that there is enough room for enhancing competence through experiential manipulation. Eradication of poverty is necessary but if not more atleast equally essential is experiential enrichment for fullest psychological growth. However, success of such programmes is contingent upon a number of factors i.e. social, economic, political etc. and therefore, we have to carefully analyze and decide about priorities, targets, and requirements of such programmes. This is more important in India where provisions to help weaker sections of society have not only failed to achieve the desired changes but also have generated many depreciable side effects. For instance

it is not only true that the feeling among weaker sections that backwardness is functional has increased but also they do not desire to be advanced because remaining backward provided a comfortable situation.

It seems more reasonable, therefore, to provide integrated welfare programme on the basis of deprivational background rather than membership of specific caste or cultural group. In addition, attention should also be paid towards more effective utilization of existing potentials by treating individuals in terms of their own distinct abilities and achievements. This involves assessment of potentials as well as provision of opportunities for a diversity of conditions suited to the diversity of individual abilities and needs.

It has now been realised that a programme of integrated services which combines education, health, nutrition and welfare which includes parents' education can yield desired results towards the welfare of the disadvantaged child.

Therefore, a welfare programme should include all the aspects of the child's development for his optimum physical, mental, emotional, educational and social development. The programme should strive to:

- (i) promote child health through periodic health care
- (ii) promote optimum nutritional standards during the formative years of childhood to enable him to develop his innate physical and mental potentialities.
- (iii) promote proper climate and adopt measures for the healthy and balanced growth of the social and emotional aspects of the child's personality.
- (iv) reduce educational disparities by providing planned environmental stimulation aimed at supporting development of the cognitive abilities of the child.
- (v) bring about readiness in the child for school learning and thus to help combat stagnation /and wastage in the early years of schooling.
- (vi) promote an environment of security, love, acceptance and to help the child to build up desirable attitudes, values and behaviour.
- (vii) protect the child against the social and mental hazards of an unfavourable social environment.
- (viii) create community awareness of the needs of the preschool child and to elicit and to build community involvement and participation in the programme.
- (ix) develop self-concept by enhancing self-confidence and self-awareness.

Psychological services can especially be used to help the disadvantaged in developing his personality in the following ways:

Every society judges its members by a dominant set of values. In addition, the individual learns to value the reactions and opinions of others whom he considers significant. Since the disadvantaged possess many characteristics which the dominant society devalues, they often receive negative reinforcement, and, as time goes by, accumulate information and perceptions which indicate that they are unworthy and inadequate. Parents of the disadvantaged may say that education is important, but they do not know how to foster the skills and attitudes conducive to success in school. As a result, vicious circle is established in which the child does poorly in school, is chastised by his teacher, goes home and receives further negative reinforcement. These experiences serve to lower his self-concept. Each individual develops and holds attitudes, beliefs, and knowledge about himself, which he acquires through interaction with others. Since the disadvantaged children are subject to many negative experiences, they easily develop negative self-concepts. The fact that the self-concept can be altered positively through appropriate experiences, should, however, prevent the adoption of a pessimistic attitude by educators and guidance personnel.

Second area in which the disadvantaged child differ from others is lack of motivation to achieve academically and learning to work for delayed gratification or rewards. If, as Educators, Psychologists and Guidance personnel, we are to alter the motivational patterns of the disadvantaged, we must better understand the development of such patterns. Maslow (1954) suggests that motivation arises from the individuals need to develop. If disadvantaged are to develop the motivation to achieve, considerable attention will have to be given to the milieu in which motivation develops.

Social behaviour is another area in which the characteristic pattern of the disadvantaged children differs from others. Since the disadvantaged frequently hold social values which differ from those of their more affluent classmates, disadvantaged child may be frequently rejected by others. The disadvantaged child may refrain from asking or responding to questions in class because he fears ridicule. He may be too reserved and withdrawn to participate adequately in the classroom programme. Language, is another area of marked difference between the disadvantaged child and the school culture. Problem with language interferes with academic learning and jeopardizes teacher-pupil relations. Children from disadvantaged homes frequently speak in a dialect or use syntactical structures

that differ markedly from those used in the schools. The language pattern of the disadvantaged families deviates markedly from those of the school. The importance of language development has received additional impetus from studies such as Wharf (1956) and Vygotsky (1962) who consider language to be basic to problem solving and concept formation abilities. Ineffective, inefficient, and limited intellectual functioning has long been considered to be a significant characteristic of the disadvantaged.

Since the disadvantaged children frequently have weak formal verbal expressive abilities and since they are often observed from a biased viewpoint, school personnel must develop a variety of techniques for collecting data. Psychologists should be careful in conducting individual interviews. Group discussions can provide insights into the problems of disadvantaged children that are not easily identified in other settings. Language patterns, attitudes and beliefs can often be detected in the group settings.

As discussed earlier the success and effectiveness of the guidance programme rest on the involvement of the teacher educators, administrators, teachers, guidance counsellors, psychologists and social workers. The role

of these persons in the guidance of disadvantaged are multifarious. The educational administrators and guidance minded teachers have to establish the professional climate in their schools and convey to the other staff members by encouraging them to develop innovative programmes for disadvantaged children. They can assist in selecting staff members with the personal attributes, professional training and the necessary experience to work successfully with the disadvantaged. Community resources may also be used to meet the needs of the disadvantaged and to develop and support positive attitudes towards ^{the} disadvantaged child.

References

- Bruner, J.A. (1961): The cognitive consequences of early deprivation, In P. Solomon et al (Edn), Sensory deprivation, Cambridge Harward University Press, 195-207.
- Coleman J.S. et al (1965): Equality of educational opportunity U.S. Offices of Education Report, National Centre for Educational Statistics, Washington D.C.
- Hess R. and Shipman, V. (1965): Early experience and socialization of cognitive modes in children. Child Development 36 (2). 869-887.
- Karnes, M.B., Zehrbach, R.R. Jones, G.R. Macgregor, N.E., and George, J.M. (1966). The Efficacy of a pre-vocational curriculum and Services Designed to Rehabilitate Slow Learners who are School Dropout, Delinquency and Unemployment Prone. Champaign Ill.: Champaign, Community Unit IV Schools.

Malik, G.M. (1980): A comparative study of First Generation Learners with others in Sapore Town. Dissertation for pre-doctoral degree in Education, University of Kashmir.

Maslow, A.H. (1954): Motivation and Personality. New York: Harper & Bros.

Mehta, P.H. Kanade H.M., Singh, N. and Saraswat, R.K. (1981): A study of First Generation Learners in class I. Paper presented at the National Conference in Applied Psychology, Bombay.

Mehta, P.H. and Saraswat, R.K. (1984): Variation between schools Across Areas and Its Implications for First Generation Learners. Paper presented at the Third Annual Conference of the Comparative Education Society of India, New Delhi (mimeographed).

Mehta, P.H. and Saraswat, R.K. (1984): First Generation Learners Across Areas Varying in Level of Development. Journal of Social and Economic Studies, 1,2, Sage Publications New Delhi/Beverly Hills/London.

Merton, R.K. (1948): The Self-fulfilling prophecy. Antioch Review, 13, 193-210.

Maurison, A. and McIntyre, D. (1971): Schools and Socialization, Penguin, London.

Peaker, G.F. (1967): The Regression Analyses of the National Survey in Children and Their Primary Schools, Plowden Report, Report of the Central Advisory Council for Education (England), HMSO.

Pushpa, M. (1980): Social Deprivation and Cognitive Development of Primary School Children. Social Change, 10, 31-35.

Rosenthal, R., and Jacobson, J. (1968): Pygmalion in the class room, New York: Holt, Rinehart & Winston.

- Shanmugam, T.E. (1979): Deprivation and its Effects upon child Development. Journal of Indian Education, 4,5: 1-5.
- Singh, A.K. (1979): Social Disadvantage, Academic Achievement and Educational Policy in India, paper presented at the Regional Seminar on Educational Research in Relation to Educational Reform in Asia and Oceania, National Institute of Educational Research, Tokyo, May 31-June 9.
- Singh, A.K. (1980): Social Disadvantage and Academic Achievement. Social change, 10, 1&2.
- Singh, A.K. (1983): Parental Support and Scholastic Achievement, Social change, 13,1,9-14.
- Sinha, D., Tripathi, R.C. & Misra, G. (1982): Deprivation, its social roots and Psychological consequences. New Delhi: Concept Publishing Company.
- Solanky, D.C. (1966): Attitudes of First Generation Learners Towards Education. Dissertation for Course in Research Methodology, NCERT, New Delhi.
- Vygotsky, L.S. (1962): Thought and Language. Boston: Massachusetts, Institute of Technology Press.
- Wharf, B.L. (1956): "Language, Thought, and Reality". J.E. Carroll (Ed.), Selected writings of Benjamin Lee Wharf. New York: Wiley & Sons.

TITLE OF PAPER: DEVELOPMENT OF AUDIO-VISUAL (TAPE-SLIDE)
MATERIALS FOR EDUCATION AT THE ELEMENTARY
STAGE IN THE AREA OF HEALTH HYGIENE AND
CHILD CARE

Kamla Bhutani**

The whole process of education is centred around the child whose progress symbolises the progress of the nation. In this welfare lies the welfare of the country. The child holds the key to future advancement in all the areas that is why National Policy on Education (1986) in its child centred approach has highlighted the holistic nature of child development viz physical, mental, emotional, social, moral etc. The emphasis is on providing educational activities to enable the child to discover his talents, sharpen his abilities; develop his physical and intellectual potentialities to the fullest, develop his social skills and foster his emotional well being.

Healthy mind and healthy body go together. It is often said that if children are physically healthy, the pace of their cognitive development will be faster and they will be able to effectively contribute to the progress of the country. Some of the significant parameters of the quality

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of life of any nation are infant mortality rate, incidence of malnutrition, the morbidity picture and the literacy rates. A sick child spends most of the time in hospital and thus lags behind other children of his age in every field. The high rate of infant and child mortality and the fragile health of children influence negatively their ability to develop to their full potentials, affecting their overall performance both in and out of the school. Children who come to school after having suffered prolonged illnesses and malnutrition are all too often trapped in the cycle of poor academic performance, failure and dropouts. According to Patel (1983) the incidence of wastage and stagnation in our country is so high that out of 100 children who enter class one, only 40 are able to pass class five and only 25 pass class eight. One of the reasons of this high wastage and stagnation rate is poor health of our children, that is why, it becomes much more important for parents as well as others to be alert to issues pertaining to children's survival and health.

The educators and planners of our country have also emphasized the need for proper physical development as well as mental growth of young children. Early Childhood Care and Education (ECCE) programmes have received priority since

independence. Education Commission in 1964 has stated that one of the important objectives of pre-primary education is to develop in the child, good health habits and to build up basic skills necessary for personal adjustment such as dressing; toilet habits, eating, washing, cleaning etc(1971).

Realising the crucial importance of rapid physical and mental growth during early childhood, government started a number of programmes of Early Childhood Care and Education. Declaration of National Policy for children in 1974 shows the commitment of government for the development of children. The primary need of a child especially if he is from an underprivileged society is sheer survival. If he does not get adequate food and protection from disease when he is young, he may not even survive to participate in educational process later on. The needs which are related to the physical well being of the child are adequate food, sleep, rest, exercise and a clean and healthy environment.

The National Policy on Education 1986 has further strengthened the commitment of the government for this kind of investment in the development of the young child. ECCE has received high priority among educational programmes. Physical care as well as cognitive stimulation at early stage by homes as well as schools are seen as vital for

later years of life. The ECCE involves the total development of child i.e. physical, motor, cognitive, language, emotional, social, and moral. The age span under consideration in ECCE is from conception to about six years. Even a modest development process during this period includes care of mother during lactation, correct infancy feeding practices, immunization of infants from communicable diseases, mother's education in child care, early childhood stimulation, and health and nutritional support throughout.

The Programme of Action of the National Policy on Education (1986), has highlighted the need to develop useful instructional materials through the use of educational technology for improving quality of health as well as education both in formal and non formal sectors. It says that modern communication technologies have the potential to by pass several stages and sequences in the process of development encountered earlier. Both the constraints of time and distance become manageable. The production of relevant and useful instructional materials therefore can form an important aid of teaching learning process.

A research cum development project was undertaken by the Psychology Department to develop tape slide material for health education, and child care for girls of rural areas (Mullick et.al 86).

Health, hygiene and child-care are important areas in which every child as well as adults take interest. To know about oneself, to keep oneself clean and to be healthy enhances one's self concept. Every body likes clean and healthy children. Cleanliness begins at home. If children form habits of cleanliness they will teach their parents and then their neighbours. In this way an awareness of health and hygiene can be given to the children by audio visual methods which are found to be more effective than lecture method. Audio visual method is helpful to even those illiterates who are unable to read and write. Educational technology materials are now being developed utilizing a variety of media ranging from books, picture books, text books, audio tapes, slides, film strips, film, television and computers etc. The audio-visual media like tape slides, films, video tapes can be utilised effectively in conveying important messages like health hygiene and childcare to children. In these materials, the information is presented through two channels, the audio and the visual. The child looks at the visual stimuli on the screen and listens to the verbal explanations through the auditory inputs.

Tape-Slide (T.S.) learning materials are those in which the subject matter is presented through two channels viz. the audio and the visual. The student looks at the visuals which are presented on the screen through slide projectors and listens to the explanations which are given through the tape player. There are many advantages of these materials. They stimulate the teachers' functions in a class room. Teacher's talk is taken over by the tape and his chalk and board are replaced by the slides. They bring into the classroom in-accessible processes, situations, materials which are otherwise difficult to be arranged by a teacher. The illustrations-photographic or verbal stimuli on slides are developed by professional artists and experts. They are apt to contain more clarity and realistic details to sustain student interest, curiosity and concentration. The voice in the tapes can be fed into by a professional speaker. All types of sounds-animals, human, mechanical, can be fed into the tapes to produce realistic effect. They are also flexible in use. They can be used in large classes of about 300 students. T.S. materials are even better than the audio-motion visuals like films, television and video-tapes. They are relatively inexpensive. Their components viz. slides and tapes can be easily developed. They can be edited 1

and modified in shorter time and with lesser cost. Over and above, television and films present messages faster than the information processing capacity of the Central Nervous System of a learner. Against this, slides store the information in display. They have thus, good 'referability' in a normal communication situation. Tapes can also be stopped at any time for clarification. Hence information inputs per unit time, in T.S materials can be controlled at the will of teacher and the learner. Teacher can always give appropriate time to students to view the illustrations. He can also review, comment, discuss and answer questions, if any. They are more suitable for organising interactions of students with content to be presented through them.

T.S materials are now a days being used for individualised instruction as well as in group instructions in formal as well as non-formal education. They are particularly suited for learners who are illiterates, and semiliterates who are generally receiving education through a non-formal education mode.

Tape slide materials were developed in the area of Health, Hygiene and Childcare on the following topics:-

1. Menace of Flies.
2. Safe water
3. Dental care

4. Cleanliness of the child
5. Breast feeding
6. Top feeding
7. Solid foods for baby

In preparing tape slide materials, the principle of developing self-learning materials were utilized which are to:

- (a) formulate educational aims in Health Hygiene and Childcare.
- (b) specify the aims in terms of learners' behaviour
- (c) develop criterion test items
- (d) develop tape scripts for tape slide materials
- (e) develop the tape slide programme

The educational aims of preparing tape slide materials on 'Menace of **Flies**' is to make the learners to understand the importance of clean surroundings. Apart from other advantages their eatables will be free from **flies**. The aim of the second programme on safe water is to make the learners understand the importance of safe water and how to take care of source of safe water as well as how to keep such water safe in houses. The aim of 'Dental Care' is that learners become aware of personal hygiene. They should take care of their teeth and mouth. Cleanliness of mouth and teeth is very important for one's sound health. In cleanliness of children programme, overall cleanliness of

the children has been emphasized. If we remain clean we can be away from many diseases. Importance of bathing; cleaning the nails, hair; nose, eyes etc. has been highlighted. If we can impress upon the children as well ^{as} girls who look after their siblings when their mothers go out of home, they themselves will remain clean and will keep their siblings clean and later when these girls become mothers, will keep their children clean and thus healthy.

Breast feeding is very important for every mother and child, psychologically as well as physically. Importance of breast feeding, proper method of breast feeding and what should the feeding mother eat, are of utmost importance. They are highlighted in this programme prepared for rural girls of 11-14 years of age. Under Child care another important area is top feeding. When the child is about four to six months old, he sometimes needs top milk to supplement his mother's milk or sometimes a mother cannot give breast milk due to various reasons, so she is compelled to resort to milk of cow, buffalo, goat or dairy milk.

When the child is about four months old, mother's milk or top milk alone are not sufficient. He has to be given some supplementary foods for proper growth of the child. This is the objective of the tape slide material on solid foods for baby.

For every topic mentioned above, eight to ten objectives in terms of learners' behaviour have been prepared.

Criterion test items are designed to obtain evidence as to what objectives of the T.S presentations have been achieved. Since the target group were illiterates, oral tests have been developed. Most of these test items are of recognition type in which multiple choice items are read out to the learners and they are required to choose the best answer. The choice reflects the extent of her capability acquired through the T.S presentation. A few test items are of recall type in which the learners are required to recall specific names, terms, processes, methods, procedures and phenomena. They are short answer type of questions.

The scripts have been developed by the project team members. Script writing is a creative process in which the writer examines the objectives, derives suitable content, makes a mental image of the sequences of visual and auditory inputs required to explain a concept, fact, rule, method or a procedure.

First of all, content elements for each script have been specified. They are divided into a few sections. For each section, learning frames are designed. Each frame is written on a separate card. On each card description of the picture and the commentary that will go with the picture is written.

After developing the script each script is scrutinised section wise with the help of subject specialist, the artist and the photographer. The format of each script is discussed. If any visual reference is available, it is marked for making a copy of doing photography. If any illustration is to be drawn, it is marked to the artist, and if any photography is to be done, the lists of situations for outdoor shooting are prepared. After this, black card of 6"x9" are made and photographs are pasted on each card and the commentary for each card is also finalised. In this way, a set of story board for each tape-slide presentation is finalised. The services of a professional commentators of All India Radio were obtained and the commentary for each programme was recorded. In this way, Tape slides programmes were developed.

The programme on 'Menace of flies' was the first to be prepared. It consists of fifteen multicoloured shots. Each slide was explained through taped commentary. In order to investigate the effectiveness of tape slide materials, it was decided to conduct a tryout on a sample of target group of forty one girls of 11-14 years in the village, Photokhurd, Alipur Block Delhi. They were either dropouts or illiterates.

The format of the programme was story type. The running time of the presentation was 11 minutes. The learning outcomes were measured with the help of 23 short answer type questions included in a criterion test which was administered individually to each learner. The investigator read the questions and recorded the answers given by the learner.

The objective of the study was to inquire as to whether the tape-slide presentation could teach illiterates without the assistance of a teacher. If so, how much, it was effective in teaching different objectives. The effectiveness was investigated in terms of the knowledge acquired by the learners after they had the tape slide presentation. For this purpose their initial knowledge was assessed by the administration of the criterion test. There after, the same test was administered after the presentation. In this way, the gain in knowledge due to the presentation could be investigated. One of the sub-objective was to discover weaknesses in the presentations with a view to improving the effectiveness of the presentation.

The learner engaged time for the tape-slide presentation is forty minutes, which includes time for pre-testing and post-testing. Through this presentation 68% of the learners were able to score 64% scores and above. The difference

between the mean scores on pre-test and post-test was highly significant. No outside help was given to the learners. The presentation is thus a viable means of teaching illiterates without external help. The presentation has been successful in communicating ideas in health education without the intercessions of teacher. At least, the presentation was quite effective in attaining the following objective:

- a. To list places where flies breed in the house.
- b. To recognise that food infested by flies is harmful and causes stomach diseases.
- c. To recognise that suitable medicine should be taken and doctor should be consulted.
- d. To state how to keep flies away from food articles.

When the effectiveness of the programme was established, other scripts were prepared. It is hoped that these tape-slide materials ^{would} be very useful for children at elementary stage in selected areas of Health Hygiene and Childcare.

REFERENCES

- Education Commission (India), Education and National
Development (Report of the Education Commission)
1964-66 Vol.I (Reprint Edition) NCERT 1971 P 3.
- Govt. of India, M.H.R.D. National Policy on Education, 1986.
- Govt. of India, M.H.R.D. Programme of Action, 1986.
- Mullick S.P., Ramachandran K. and Bhutani K. Use of Tape
Slide Materials for Non formal Education of illiterate
girls 1986.
- Patel, S.P. Equality of Educational opportunity in India,
National Publishing House, New Delhi, 1983.
-

TITLE OF PAPER: FACILITATING SELF-DISCOVERY PROCESS IN
ELEMENTARY SCHOOL CHILDREN

Gursharan Kaur Joneja*

"Until we know ourselves, we cannot be ourselves"

(Macmurray, 1935)

We as parents and teachers are in the habit of imposing conventional academic standards. We expect students to master whatever course content is prescribed for their particular grades and then test this academic knowledge only as a measure of their growth and learning. We criticise academic failure. For us, success is pride and failure is shame. We reward the achievers and criticise, neglect or reject the poor achievers though they may be better in other activities. We ignore the child's impulses, his likes and dislikes. Whatever our own attitudes and values are, lead to approval or disapproval of various behaviours among the children. That is why, we are not happy with all the children and we find all children more or less troubled. We have complaints about children's behaviour at all stages

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e.g., poor achievement, hostility, truancy, delinquency, indiscipline; lack of concentration, disinterest in studies, dropping out of school, disrespect to authority and destructive tendencies etc. The children carry these troubles and unhealthy attitudes into their adult lives also. Could we expect that with all this, they will become mature and responsible men and women of tomorrow. If not, then what is required. In this context following observation made by National Policy of Education (1986) are quite relevant :

" A warm, welcoming and encouraging approach, in which all concerned share a solicitude for the needs of the child, is the best motivation for the child to attend school and learn".(P-11)

" In the Indian way of thinking, a human being is a positive asset and a precious national resource which needs to be cherished, nurtured and developed with tenderness and care coupled with dynamism. Each individual's growth presents a different range of problems and requirements, at every stage ----- from the womb to the tomb" (P-2)

In the above statement, it is implied that each child's needs, capacities, interests, values, impulses or feelings etc., should be seen as assets and each child should be helped to make the most of what he is by providing learning-living climate conducive to the total

development of the child. A variety of experiences in all spheres of life and efforts of school personnel are required to assist in making the education more meaningful for the pupils. Educators should be dedicated to assist children in their search for self-realisation, self-development and in developing the most meaningful and appropriate ways of interacting with others.

We observe that children learn much more than we intend them or expect them to learn in the classrooms. In the books on learning, it is named as "incidental learning" also. Not much attention is given to this type of learning in the school. Yet much of this type of learning consists of attitudes, interests, appetites, aversions, opinions, pre-dispositions, values and feelings which are amazing, persistent and pervasive in the further development of the individual. It is required to expand the child's perception of environment to develop and examine his own abilities and interests; and to clarify his own value system; to understand the influence of others and his own value etc., to develop his self-understanding and appreciation of self.

According to Jersild (1968), "self acceptance and understanding of self are closely associated. To accept himself, a growing person must be aware of himself. To accept his limitations he must be able to recognize them.

Self-acceptance, in other words, requires awareness and perception. But a child's ability to become aware of himself will be influenced by the way he feels about himself and the way he feels about himself himself will depend, in part on the way others feel about him and encourage him in the process of self-discovery" (P.549)

In our present school system, we expect children to learn anything about language, arithmetic, geography, social studies and various other subjects but we do not expect them to learn about themselves. Neither we know child's resources, reaches and limits of his ability, nor we do allow him freedom or help him to make the most important discovery ----- "himself". We just neglect children's potentialities for self-understanding while pushing other aspects of training.

Self-understanding includes understanding of all aspects of an individual, viz., abilities, interests, behaviours, attitudes, values, conflicts, anxieties, likes, dislikes, impulses, his role in the society etc. Self-understanding is something that comes very slowly. All children are striving for self-understanding and self-realization. In daily living with classmates and wise and sympathetic teachers, they can gain increased insight into themselves and others. This can be accomplished

through association with adults who love youngsters, who have insight into human motivations and feelings, and who know how to inculcate values without moralising and lecturing. This is not an easy task, and it requires truly dedicated person who believes in children and who feels that the physical, intellectual, emotional and social development of all children is an important task of school learning.

As student of psychology, one knows that each child has the capacity to discover himself. Each child has the capacity to discover his potentialities, ability to interpret events; ability to deal with impulses or feelings, ability to develop realistic goals, ability to feel his likes; dislikes and interests; and set standards for himself. Intelligence as measured by intelligence tests is not related to self-understanding. Self-understanding can be developed in all individuals with different combination of various abilities and characteristics. The goals ---- wholesome self-concept, self-worth and successful accomplishment ----- are the same, and can be achieved when each child is helped to discover himself as a valuable member. Even limited capacities or abilities should be seen as assets and child should be helped to learn to accept as he is and make the most of what he is. Jersild's (1951) observations seem to be pertinent here:

"Every child is actually or potentially a child psychologist. From an early age without being deliberate about it, he acquires ideas and attitudes about himself and others. They are woven into pattern of life."

It indicates that self-discovery process starts very early in childhood. "I can do this," "I can stand" (a feeling in 7-8 months old child), feelings get consolidated before the child turns to "I am" expressions, like, "I am six", "I am school going child". To be able to do something or sense of mastery is closely related to a sense of worth, importance and ability to gain respect from others and maintain one's own self-respect. 'I can' or 'I can not' indicate that mastery and coping ability are closely related to sense of identity. Thus this aspect of identity has precursors or roots in all of the child's contacts with environment ----- acts upon, against, or at the environment, in contrast to the acts with the environment which contribute to relatedness, identification, and empathy.

Over and over again, the impact of a new challenge intensifies the child's awareness of himself, his capacity to meet such a challenge enhances his pleasure, his sense of adequacy, and his pride.

Through his coping experiences, the child discovers and measures himself, and develops his own perception of 'who' and 'what' he is and in time may become. That is, the child creates his identity through his efforts in coming in terms with the environment in his own personal way. If, therefore, the elementary school child is to be helped to understand himself, he must be helped to understand why he feels as he does, the importance of his activities and methods, exploration and try out of his powers and investigation of his behaviour, what changes he wants in himself or in the environment and why.

Jersild (1965) observed that :

"If accepted, welcomed, allowed to be himself, and given opportunity to learn and a degree of freedom suited to his maturity level, the child will launch a career of self-discovery. He will explore, survey the boundaries; try out his powers, investigate the nature of his relationship with others, and test the emotional limits and confines involved in this relationship"(p.17)

The role of the school is to create an environment where a child can discover his abilities, interests, attitudes, values and feelings and can face their impact and meaning. He should be given freedom to express and reveal his discoveries and encouraged to become self-directing. Havinghurst (1953) states that three "great outward pushes" characterize the ages from six to twelve :

"There is thrust of the child out of home and into the peer group, the physical thrust into the world of games and work requiring neuromuscular skills; and the mental thrust into the world of adult concepts, logic, symbolism and communication" (p.25)

In the light of above observation, the school can provide opportunities for growth in self-understanding.

We should realise that going to school is a major and exciting transition in child's life. It is exciting in part because it is felt to be irrevocable. It is also exciting because it is seen as an indispensable access route to new forms of skill and to becoming "grown up". "I have grown up as I am going to school." "I will become something!" The child who has not joined the school says, "why I am not going to school when he is going ? I am not a "baby" now."

The children feel that one who does not go to school will neither be able to learn anything nor be able to know anything as grown up. They do not foresee how going to school will help them in future. But some children attempt to put together schooling with future jobs, e.g., when I will grow up, I will become advocate, engineer, postman, teacher etc. etc.

Some children who do not like a particular subject don't see the reason to study it. "Why should I study Maths, What good it will do to me". Some children in upper primary classes also try to put together specific school subjects with future scope or jobs. "Science has better future." "I do some sums in Maths, because I am going to be accountant when I grow up" "Sports are good for body building but it is not required for office jobs".

With these kind of perceptions of the children, it is required to help them to know the utility of their study of various subjects. Teachers should help the child to discover personal meaning of the course or learning material for him. We cannot comment or think that the curriculum is for fun. Teacher has to teach the prescribed syllabus in the teaching period. However, children should be helped to understand just how relevant these educational contents are now and in adult life. Similar observations are made in NPE-1986 :

"Mathematics should be visualized as a vehicle to train a child to think, reason, analyse and to articulate logically. Apart from being a specific subject, it should be treated as a concomitant to any subject involving analysis and reasoning." (P-23)

Commenting about the science education, NPE
States :

"Science education programmes will be designed to enable the learner to acquire problem solving and decision making skills and to discover the relationship of science with health, agriculture, industry and other aspects of daily life' (P-23).

Hence, some activities can be organized as a part of syllabus to develop understanding of content and its relevance to students by student involvement through a variety of exercises in each topic planned with the help of students and actual tryout by the students. This will also develop interest besides helping student to know why he is learning it, what has its relevance to him.

Describing basic principles of Piagetian psychology which influence the method of teaching young children; Grewal (1984, p-266) mentioned that even newer methods of lectures accompanied by demonstrations are not as much effective as having the child discover or invent ways of dealing with objects himself. If a teacher carries out the experiments in the presence of child instead of making the child carry them out, the entire informational and formative value offered by an experience is lost.

The school should help each child to develop and examine one's own interests that are uniquely his own and growing. The child's ideas, interests and impulses seem to us crude because they are not measured, but they ^{are} very useful. According to Dewey : (1966)

" to satisfy an impulse or interest means to work it out, and working it out involves running against obstacles; becoming acquainted with materials, exercising ingenuity, patience; persistence, alertness, it of necessity involves discipline -- ordering of power --- and supplies knowledge."

Hence the child's activities could be directed giving them exercise along certain lines, and could thus lead up to the goal which logically stands at the end of path followed.

The child's impulses, his likes and dislikes, his interests whether in conversation or communication, in inquiry or finding out thing; in making things, or construction and in artistic expression are the natural resources which do get shape with time and become more definite if some outlet becomes available. Actually, child even seeks outlet, as he requires different medium in school, at home, in industry etc., for

different impulses, it is we who discipline him while ignoring his natural impulses. The children could be encouraged to prepare experience charts concerning their likes, hobbies, interests and different activities which they do and then could be helped to find outlets.

Co-curricular activities also prove useful to fulfill student needs, challenge his abilities and build constructive attitudes. We know that elementary school children engage in a variety of activities and interest in these activities is at its height in middle childhood and late childhood. Children are interested in physical activities like bicycles, throwing, catching, jumping, skating and also playing particular games etc., in exploring arts and crafts, handling tools, collecting jumble of things and creative activities. Many activities are brought into school by students themselves. They could be assisted in developing more meaningful activities with their ability, values and attitudes.

Through play, children learn physical, intellectual and social skills and experimenting new ways of solving problems. Play also provides outlet for expression of feelings and helps to understand and help children, so much so, that play therapy is used as one of the methods of treatment in child guidance clinics.

Besides play and hobbies, now a days children are also found reading comics, listening to radio or quietly watching television programmes. At that time they are not only passive listeners or viewers, rather "doers". They are actually in imagination; identifying themselves with active characters in the stories, radio programmes or on the television screen --- in their minds ---- be carrying on similar activities. It is also that children, especially in late childhood, are seeking identity and they are in need of experiences in which they participate in sharing planning; doing and evaluation. The activities should be action oriented and motivating so that they can test both their physical and mental energies. The activities at this stage should involve problem-solving, critical thinking, plan of action, responsibilities and work related activities. Planning activities, trying them and meeting success has 'ego-relevance' for the child. He feels, he is up to the expectations of others and thus tries to plan more challenging work for himself.

Children, from their early child, by imitating the behaviour of various adult members viz., parents; postman, milkmaid, street hawker, doctor and nurse etc., come to realise that the world is shared by others and

and they try to understand it, their own relationship to it and grow less and less self-centred. Teacher can utilize this imaginative ability of children and they could be encouraged through 'Role-Play' to project themselves in to the place of various characters and understand not only in terms of physical traits but also how the world seems to other person. The children may be helped to examine what is important for them, what they like; how they relate to their peers, siblings, parents and teachers. Exposure to a wide variety of male and female roles in our society may also help them to learn about masculine and feminine social role and understand that each child has to choose his own adult life style. They could be encouraged to create their own plays concerning school and family life, decisions, values, problems interests, interaction with others etc.

Not only that, some group discussions could also be held in the classroom in which children can freely express their feelings, discover how others feel, and learn how others have successfully solved similar problems. In the discussions children learn to interact, develop inner controls in accordance with appropriate behaviour and develop a sense of self-esteem and confidence. Through discussions on subjects, like, what is the utility of studying maths

or how to maintain discipline in classrooms, how to study a particular subject or planning for a picnic or visit to science fair, book fair etc., children can be encouraged not only to express their views but also listen to others and ask questions. Children have many questions to ask about themselves or about things they observe in themselves, in others or in the environment and need answers to interpret their experiences with people, environment and other experiences. The immaturity of young minds and lack of experience may cause misinterpretation or lack of judgement. Helping the child to find answers means increasing his quest for more information. If no information is provided or wrong information is given, the child may become aggressive or withdrawn or suspicious in his attitudes towards teachers and others.

Children talk about their feelings or ask questions only from adults whose love and recognition they seek, who listen to them attentively without showing any disapproval or disregard for child's feelings. If children are listened to comfortably, they can talk about a variety of their experiences and their feelings, both positive and negative to make it meaningful for the teacher's understanding. In this way, they come to understand themselves better and are thereby better prepared to make decisions in new situations. Hence, in order to help children in school,

teachers' relationship with pupils needs to be based upon understanding, trust and confidence. Teacher should be sympathetic, should have genuine interest in children and should examine his own attitudes and values. Even teachers need to understand themselves also in order to provide the children desirable experiences and environment; so that the child sees meaning in self-discovery process.

Opportunities for self-discovery can be everywhere, at home, school, playground, hobbies, social interaction and work etc. If we help the children in developing self-awareness and positive self-images at the elementary school stage; they will not only learn to understand and accept themselves but will also learn to interact more effectively with others, may begin to see themselves in relation to different roles in society and understand its implications for their future lives.

REFERENCES

- Dewey; J. The Child and the Curriculum and the School and Society. Chicago : The University of Chicago Press, 1966.
- Grewal, J.S. Early Childhood Education: Foundation and Practice. Agra : National Psychological Corporation; 1984.

Havinghurst, R.J. Human Development and Education.

New York : Longmans, Green. 1953.

Jersild, A.T. Self-Understanding in childhood and adolescence.

American Psychologist, 1951, 6, 122-126.

Jersild, A.T.; Kenneth, H., and Associates. Education for
Self-Understanding. New York: Teachers College,
Columbia University. 1953.

Jersild, A.T. In Search of Self New York: Teachers College,
Columbia University, 1965.

Jersild, A.T. Child Psychology. Prentice-Hall, Inc. 1968

Government of India, Ministry of Human Resource Development
National Policy on Education 1986.

TITLE OF THE PAPER: THE CHILD AT THE CENTRE OF EDUCATION -
A DEVELOPMENTAL VIEW

N. VAIDYA *

INTRODUCTION

Education, as field of inquiry as well as practice, is very easy to verbalize about if not understood. Its inherent beauty is that the more it is understood, the less it is grasped. Even the various parameters of a simple term like 'childhood' cannot be precisely specified. The so called principles of teaching, which have acquired natural status over the years, hardly clarify anything psychological when it comes to teaching-learning process in our day to day classrooms. The record of the contribution of educational psychology to the development of education over a period of 100 years or so is least flattering. The clerical system of education, has done a lot of havoc both to our educational system and the natural development of children. Historically speaking, we missed the first industrial revolution. We now need not miss the second industrial revolution which has been knocking at our door step for the last several years. Here undoubtedly, our success depends upon the quality of mind developed at school. Our present day teaching learning process has to be simply reversed. It has to be based upon the processes of thought rather than its products;

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and that too in an open frame of reference. In other words, questions and answers have no longer to remain fixed for years as is the case today. The whole teaching learning process has to be characterized by firmness, dynamism and discovery at the same time. Result, self-learner who is his own boss in disciplined imagination and thought as well as action. To that extent, he becomes an enlightened soul chartering his own course away from his own immaturity within the Gestaltein context of integration with other variables, say, intellectual, social, cultural and the real world of work.

The developmental view of learning, if taken seriously, is an alternative rather anti-education system which has been talked and advocated seriously, at least, for the last twenty years or so. Its greatest exponent in this century is the late Prof. Jean Piaget of Switzerland. According to him child is essentially active. It is in his nature to learn. Nay, it is in his nature to go on learning and learning as well as refining his ideas continuously,

He distinguished between development and learning but, at the same time, he, in his scheme, subordinated learning to development. Any normal child in his view is quite capable of forming sound scientific and mathematical concepts. The relevant logico-mathematical structures develop as naturally in him as, say, learning to walk. For the latter type of learning, he need not be aware of the laws of locomotion. Failure, of course, is there in abundance but it is immaterial. Why? The reason is that he is in a position which is going strong

every moment for he does succeed in rectifying his mistakes and thereby, master his failures in the end. He thus becomes quite capable of using his own reasoning faculties for solving problems in his own environment. It is not all a case of nasty step towards self education, the chief distinguishing characteristic of any first class educational system any where in the world. This continuously reasoning individual is not at all a lonely figure or a cold blood creature. His view, on the other hand, is that maturation, experience (both physical and mathematical); social interactions and equilibrations (each one higher than the other) play their role in spontaneous development. Let us, therefore, concentrate only on Piaget here.

1. MAN AND HIS WORKS

The work of professor Jean Piaget (1896-1980) is little known in this country. There are many reasons for this, chief being that he wrote profusely only in French. Secondly, he was a very difficult author to understand because he took too much knowledge for granted on the part of his readers. Thirdly, having been trained as a zoologist, he developed imaginatively the biological theory of knowledge for which he developed his highly specialised vocabulary drawn from his own intensive investigations on mollusks : organisation, adaptation, reversibility self-regulation, cognizance and equilibration etc. Over the sixty years period, he wrote about 50 original books and over 1500 monographs, papers and articles. He observed his own children closely, played marbles with others, and, using a

semi-scientific method, traced the origin of several diverse universal contents. He did not stop at this but, contrary to the tradition of John Locke, David Hume and I. Kant, attempted to provide experimental answers to the age-old philosophical questions about the nature of knowledge. It is of interest to point out here that these problems were raised right from the times of pre-socrates philosophers which he attempted to solve in his own unique way. He, thereby, founded a new branch of knowledge called the experimental epistemology. The philosophers of the day did not acknowledge him as a person of their tribe and in retaliation, he did not regard himself as the one interested in psychology, education and children. As controversy on controversy ensued, he contributed abundantly to the whole field of psychology: perception, reasoning, intelligence, dreams, moral development, space, time, play, thinking from early childhood to late adolescence, physics, mathematics, biology and logic. Some of the well known books authored by him. are : The Language and Thought of the Child. Child's Conception of the Physical World, The Origin of Intelligence in Children, Logic and Psychology The Growth of Logical Thinking from Early Childhood to Adolescence, Genetic Epistemology, Insights and Illusion of Philosophy, The Origin of the Idea of Chance in Children, and The Grasp of the Consciousness etc. Nobody, even beyond a few kilometers away from Geneva in Switzerland, really understood the full import of his works. It is of interest to mention here that almost the whole credit of compiling the allied works on Piaget

in several volumes goes to an Indian couple: Sohan Modgil and Celia Modgil currently based in England.

2. SOME MORE REFLECTIONS

The ancestry of his work can be traced to early intelligence testing in Paris, France, by Simon and Binet. Accidently, he discovered there that pupils errors on intelligence test items provided substantial clues in understanding the nature of intellectual development. In his entire work, he did not care to determine the reliability and validity of his experimental tasks used for studying intellectual operations. Instead, he designed his own symbolic logic for studying them genetically. In his work, he raised the status of an ordinary child to that of an universal child. As already hinted at, his technique of collecting data was too slack and shoddy. Equally true was his method of recording and presenting data for which he hardly touched any statistics far beyond frequency, mean and percentage. In his work, he did not make use of high speed computers which invariably is the practice today in carrying out scientific research. Still, he succeeded to relate the findings of his diverse studies to the origin of knowledge via the pupil's mind for he took the growth of epistemology seriously. In sum, he provided insights into the varied ways the universal child goes about the business of developing his own incomplete house of knowledge. He was careful enough not to take any definite position on the nature-nurture controversy. Without meddling with the word 'creativity', he explained how the human mind

goes on creating novelties, each more exciting than the other over the years. He also believed that a teacher cannot give an idea to his students and, thus, distinguished between false knowledge and true knowledge. It is perhaps in this context that John Holt in his book 'How children Fail' talked about the differences between dull children and bright children studying in the highly expensive schools of America. According to him, dull children forget before the examination and the bright children after the examination. In the Piagetian context, on the other hand, teaching means creating situations in which the underlying structures or concepts are pupil invented through exploration. Unlike L.S. Vygotsky and J.S. Bruner, he did not believe in the acceleration of mental development. He, therefore, stressed education for Understanding, Problem Solving and Finding. He appeared to be silent on punishment, reward and motivation. Selecting Cognition as the fundamental variable for intensive scratching, he showed that Action is the Basis of All Knowledge which is replaced continuously by a series of continual reflection inside the head of the growing child. Learning by doing alone is inadequate if it is bereft of learning by thinking or reflecting. The everlasting nature of his work backed up by hard evidence can thus be appreciated. To illustrate, A child is not simply a scaled down adult because both see the same thing in a different way. Childhood is, therefore, not a necessary evil which is to be tolerated at any cost. Nay, it is an inseparable part of the whole development

as understood logically by the adults.

3. STAGE AND SUCCESS

Intelligence, according to him develops in four stages. These are : Sensory Motor (0-2 years); Pre-logical (2-7 years); Concrete (7-11 years); and formal (11-15 years). Before his death, he hinted at the possibility of the fifth stage which extends from 15-20 years and takes into account aptitude variations as well as highly varied individual career commitments. This stage is now seen against the less prominent, general intellectual development of the preceding stages. Returning to the first stage, it is of little educational significance but, at the same time, the foundation of practical knowledge or pre-verbal learning is laid here. Minus language, his mind becomes truly inventive during this stage. The thinking during the second stage, resting, of course, on the first stage, is transductive. In other words, it is from particular to particular without underlying any generality. Thinking here is self centred because a child makes the judgement the way he sees the situation. At the third stage, his thinking is dominated by the reality or the content of the situation. At the fourth stage, the earlier situation is simply reversed and the adolescent pupil lives in the world of possibilities and ideas. He is now in a position to set up all sorts of hypotheses and test each of them experimentally through control experiments. He is, thus in a position to pick up the various elements of scientific methods. Piaget does not stop here, for he succeeds to hook

the various scientific patterns of thought to the origin of knowledge as seen historically. In this widest theoretical frame of reference, he also enunciated conditions under which thought moves from lower stage to higher stage of development. It is interesting to note that in the early stage of his work, he literally ran away from psychoanalysis. But towards the end of his life, he did explain how the Conscious, Pre-conscious and Unconscious hang together. These are explained with ingenuity: success, failure, and arousal of an idea from the Unconscious.

Understanding of the World

There is distinct difference between child thought and adult thought. Let us now mention briefly how the child begins to look at the world within the frame-work of nine universal contents which possess universal interest and appeal. Due to the paucity of space, let us confine the scope of discussion only to the first stage and the fourth stage of intellectual development as propounded by Piaget is :

- | | |
|--------------|-----------|
| 1. Action | 2. Object |
| 3. Space | 4. Time |
| 5. Causality | 6. Play |
| 7. Imitation | 8. Self |
| 9. Language | |

Sl.No.	Contents	Sensory Motor Stage	Purposes.
7.	Imitation	First deferred imitation appears from 12 months. He imitates reflexive activities.	Learning:
8.	Self	There is no concept of self as such in the beginning as it stands merged with the environment. However, there develops consciousness of differentiation of self or others.	In his which or
9.	Language	First language appears when there was toward the beginning.	He has
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haphazardly and inefficiently. Here, the Gestaltian advice is:

Teach Organically. Let us now quote some research finding on

formal stage in the form of key statement.

The Formal Stage

It gives way to reflective abstraction and hypothetical thought.

In the
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self and

Reduced ego-centrism gets further reduced.
Instead, ideal self appears.

none in
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Practical language gives way to abstract language.

A few comments here are quite relevant for elucidation purposes. First, the child uses the various parts of his body in learning: hand, arm, feet, ear, head, tongue and nay, even the skin. He tries to draw full benefit from various motor reactions in his perceptual field. He tries to lay his hands on anything which is within his reach. These are in a way his technologies or means of acting on things and objects. To illustrate, He has not to be taught how to put his fingers into the hole of towel or a handkerchief. Why? He does the entire operation unaided. Problems, however, arise when he tries his hand, say, on bottles, locks and power plugs. At this stage, care as well as caution by the adult is a must. At the same time, he still retains the option and is in a position to communicate with others. Thus elucidated briefly the Piagetian on concept of action. From this initial learning obtained on his own, the child is able to expand his efforts not only within a given set of situations but across the other dissimilar situations too. He continuously goes on learning and relearning ceaselessly. In fact, his progress is endless in all directions but stands little documented in literature. The point not to be missed at all is that the idea in the head of the individual child is fully free to go anywhere and develop itself in any way it deems fit depending upon the passionate pursuit of the individual concerned. If it happens; he no longer then develops problem, solving strategies haphazardly and inefficiently. Here, the Gestaltein advice is: Teach Organically. Let us now quote some research finding on formal stage in the form of key statement.

SOME KEY STATEMENTS TO RESEARCH FINDINGS ON FORMAL STAGE

It is difficult to review all researches in this area. Some reviews are already available. It is not easy to interconnect the findings firmly because of varying objectives, tasks, samples, tools and tests and the modes of interpretation. All these findings when consolidated boil down to the following conclusions:

(a) The human mind is highly dynamic. It acts on its own and thus possesses quite a bit of spontaneous thought. It is a readily-available reservoir of continually developing thought which, on close reflection and controlled experimentation, can be used easily for the development of various concepts underlying several school subjects.

(b) The concrete operational stage is quite dominant among normal adolescent pupils. Whereas adolescent pupils are in a position to set up hypotheses, they are not in a position to test them. In other words, their minds have not yet become experimental. Further, they are also not in a position to exhaust all the possibilities or combinations and permutations. At best, they can test one variable at a time in most of the cases.

(c) They stick to their thought firmly. They also enthusiastically prefer to test their ideas in the first instance. When compelled to think, their erratic individual processes of thought appear to suffer hump (s), before individual concepts

finally settle down in their individual heads.

(d) There appears significant relationships between the scores on formal thought and the several outside variables, namely, mental age, grade and age, some personality traits, socio-economic status and the type of school management. Sex differences favouring boys in problem solving exist but these need to be studied in relation to race, country, religion, region, rural/urban divide and varied conditions of schooling. Here, our limited observations are :

- (i) There are no sex differences in problem solving if boys and girls are treated equally at home.
- (ii) There are sex differences in problem solving favouring boys, if boys and girls belong to backward areas of the region or districts.
- (iii) There are no sex differences in problem solving if both boys and girls belong to the bottom group. In the top group, they try hard to succeed and equalise their performance.

However, there is a general tendency to think maximally among all adolescent pupils on Piaget type tasks. These tasks definitely fire their imagination for quite a long time.

(e) It needs to be stressed that different school subjects demand varying amounts of formal thought. Mathematics and physics demand the maximum. Secondly, role of past experience and hints and clues is little understood in problem solving.

Hints and clues only favour those who are at the transitional stage of mental development, that is, between concrete stage and formal stage. Thirdly, whereas a problem is solved in stages, it is at the same time very difficult to specify sharply the parameters of these stages. The concept of stage simply serves a practical end from the teachers' point of view.

(f) The very language of Piaget as well as of Piaget-type tests is deceptive. It is, therefore, essential to establish equivalence among the various tasks empirically. Otherwise, it is difficult to reconcile contradictions in various findings. For example, a problem supposed to be formal may turn out to be a concrete one and vice versa. Secondly, there is seen a sufficient time lag between the experimental solution and the formal solution.

(g) Like Piaget, teachers should listen more and more to the inaccurate answers of their pupils. On the basis of knowledge thus gained, they would be in a position to improve their strategies and tactics of teaching. Secondly, it takes time for schemes of thought to develop. In fact, their development from year to year is too gradual, laborious and slow. However, content and instructional intentions are some of the factors which definitely influence learning. Thirdly, self-learning and pupil-to-pupil interaction in class may be encouraged and search be made for promising results, if any. Pupils may thus open up in their own learnings unaided. Lastly, pupils use words metamorphically. Our lack of knowledge about where to hammer at

rather than go on hammering all the time makes access to child's mind difficult.

(h) The Psychometric and developmental studies on intelligence have yet to converge. There are a number of cobwebs yet to be removed from the theoretical point of view. It is worthwhile to explore whether there is a distinct possibility of a fifth stage to appear on the scene. Its existence had been hypothesized by Piaget towards the end of his life. It would then take care of aptitude variations and career commitments on which Piaget had little to say in his writings.

The role of teacher as an agent of intervention stays but in an entirely different context, the context being the framework for facilitating learning as propounded by the National Educational Policy of 1986 where teacher no longer acts as if working at an academic pump. In other words, when developmental view to learning is kept at the focus, children not only enjoy varied learnings but also work to their capacities fully. Unintendly, the present day teaching process also gets decentralized for new stimuli rather than responses also get mastered over the years. This is, interestingly enough, also advocated by the National Educational Policy, currently talk of the town throughout the country.

6. IMPACT AND EVALUATION

It is, thus, strange that the Piagetian system of thought had little to say on education. True, it does not generate

verifiable as well as testable hypotheses via psychometry. But his work is supported in principle far beyond the borders of Switzerland including India. Any piece of psychological research conducted anywhere in the world remains out of tune without reference to his work. He safely pushes aside the basic positions of stalwarts like Sigmund Freud. J.B. Watson, B.F. Skinner, Max Wertheimer, L.S. Vygotsky, J.S. Bruner and Kurt Lewin. He thus occupies the top most position in the field of developmental psychology. It is, therefore, the least surprising that his work has evoked simultaneously wide spread acclaim and ridicule. Taking an overall view, in the absence of this work, one would have heard little of the Science curriculum improvement project in U.S.A., and the Nuffield Science projects for the youngsters as well as 5/13 science project in U.K. In Australia, Prof. K.F. Collis and Prof. J.B. Biggs would have been in a pretty difficult position while developing a SOLO Taxonomy (structure of Students Learning outcomes) nearly at par with Bloom's Taxonomy. At home, the writer won't have worked on the Factorial structure of Adolescent thought within the developmental context for years; run an individually accelerated science Teachers Education Project; developed a Science Teacher behaviour Inventory; and hinted at the existence of Hump effect during problem solving when substantial departures are observed within his general development of logico-mathematical structures. And the Modgil couple would have been hammering at something else in England. It is easier to see the relevance of several

educational ideas and projects currently at work in our country. Examples of such projects are: The Hoshangabad Science Teaching Project in M.P.; The Merimbika Experiment at the Mother's International School, New Delhi, and the Regeneration of the Pushkar Valley Lakes Valley system in AJMER in which education, development and employment are interhooked firmly.

If to study knowledge is to study man, our knowledge about the human mind then stands highly enriched abundantly because of the Genevan works characterized by speculation as well as slipshod experimentation. He founded experimental epistemology in the true tradition of scholarship trailed earlier by the greatest philosophers of all times, namely, Socrates, Plato and Aristotle about 2500 years ago.

7. FINAL REMARKS :

It is, therefore, in the fitness of things to read about such a great thinker who lived passionately for his subject. In his own time, he virtually defined the whole field of cognitive development. Why? The answer is that he was a great polymath who did not at all hesitate asking big questions and that too in the right order, considered definitely out of reach by psychology in his times. He provided experimental answer to the age old philosophical questions. It is worth reiterating that failure in science is not a rare event. At the frontier of knowledge, one has to suffer being a joker at times when, initially speaking, it comes even to suggesting, say, relationships between the experimental epistemology and the entire range of human

sciences. Unfortunately, it is everybody's impression that it is very difficult to read Piagetian works. If read, it is very difficult to understand them. If understood, it is very difficult to write about them. If written about, there are misinterpretations galore. So to read him is to misread him. To understand him is to misunderstand him. To interpret him is to misinterpret him. And to judge him is to misjudge him. In sum, not to reflect on his works is to court mediocrity for he is trying to say something quite different and perhaps valuable too.

He focussed clearly in his works on the life of the mind. He explained clearly why children give the responses to his questions as they do. He viewed learning as a fascinating struggle to be enjoyed and how it leads to restructuring of knowledge in an open frame of reference. And how, it is within the realm of possibility for practising school teachers, to enrich and reconstruct school curricula imaginatively on the cheap; and that too, at the input level. Children are reasonable capable and clever problem solver too. When grown up, they shape scientific thought marvellously in their own unique ways.

Since he is now dead, he can be evaluated quite objectively. Each critic, whether he agrees with him or not acknowledges the greatness of his works. The whole benefits are ours if he is unseated from his present position of prime importance by somebody's superior challenge. But, it is in the nature of

piagetian journey which lets any one work ahead productively in thousand different ways in one's own area of professional freedom. Until such an historical hammer falls on Piaget, we should continue reading and reflecting on his works. Nay, his works may be replicated and tested at their weakest points experimentally. It is precisely of this, Henri Bergson in Creative Evaluation, talked of when he said:

To exist is to change, to change is to mature, to mature is to go on creating oneself endlessly.

Lastly, when child is placed at the centre of education firmly, it is advised that everything be not pre-determined for him. The Scales of teaching, learning and testing of environmental experiences including experimentation need to be tilted firmly in his favour. In other words, children need to be given a lot of say in their own development and education. Otherwise, our efforts are going to be counter productive in every possible way. Raising percentage of achievement, of course, desirable, is not going to solve our educational problems. We have accomplished our job if we help children to help themselves.

In works academic and intellectual development, let us remember what the Chinese philosopher Lao-Tse said :

If I don't drive among people they look out for themselves. If I don't preach at people they become themselves. A leader is best if people hardly know that he exists. A leader is not so good if people obey him and cheer him. A leader is worst of all when they scorn him. About a good leader who says little, when his work is done and his goal achieve, they will all say "We did it ourselves".

And this is what Confucious Buddha, L.S. Vygotsky, Gandhi, Tagore and Vinoba, a few out of the many who have been hammering at this for years in their working lives.

TITLE OF THE PAPER : EDUCATION FOR THE SOCIALLY DEPRIVED
AND SOCIALLY HANDICAPPED CHILDREN.

T.E. Shanmugam *

One hundred percent literacy will remain an illusion forever, unless children from Scheduled Tribes, Scheduled Castes and Backward communities in the various states in India, are brought into the mainstream of education. The population of Scheduled Tribes and Scheduled Castes in India is 15.8 per cent and 1.7 per cent respectively. Children from Scheduled Caste and Scheduled Tribes in classes I to V constitute 15.6 per cent and 4.2 per cent respectively of the total groups and the number of teachers in Scheduled Tribe and Scheduled Caste groups are 6.5 per cent and 3.3 per cent respectively. In terms of their population the percentages in classes I to V, appear to be satisfactory, but the problem begins after class V. There is a fall in the case of Scheduled Caste group from 15.6 to 11.9 per cent and for Scheduled Tribe group from 6.9 to 4.2 percent (E.P.P. 1986).

A study by Jayaram (Shanmugam 1988) in Tamilnadu reveals that 75% of the children in Vellore area, who 'dropped out' from school belonged to Scheduled Caste, Schedule Tribe and Backward groups. Eighty percent of the parents of the children did not

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receive education beyond primary school level. The occupations of the parents were mainly agriculture and daily wage earning, with monthly income ranging from Rs. 71 to Rs. 160. Jayaraman's study in the Madras city and Sarama and Sapron's (1969) study of 'drop outs' supported the findings of Jayaram.

The population of socially handicapped according to 1981 Report from 'Crime in India,' published by Ministry of Home Affairs, Government of India, is 13 lakhs. These children when institutionalised come under Approved Schools, under the Directorate of Social Welfare. The children from this group are dropouts from schools. In socio-economic status they are at par with Scheduled Tribe and Scheduled Caste and Backward Community groups. There are also destitutes, who were treated as delinquents before Juvenile Justice Bill was passed in the Parliament in 1985. Now these destitute children are housed in shelters called Juvenile Homes, and educational facilities are provided to them in the institutions themselves.

The socially deprived and socially handicapped children belong to the category of economically poor, with the life style of their own. Oscar Lewis (1966) describing the life style of the poor people says that chronic unemployment and under-employment, low wages, lack of property, lack of savings, absence of food reserves at home and chronic shortage of cash, imprison the family and the individual in the vicious circle. Thus, for lack of cash the slum household makes frequent purchase

of small quantities of food at higher prices. The slum community turns inward. It shows high incidence of pawning of personal goods, borrowing at unusual rates of interests, the use of second hand clothings and furniture. Adults in this society fight and curse as a matter of course and consider school and intellectual matters unimportant or unattainable. They live on day to day basis and if the future is considered at all, it is regarded with apathy and fatalism. In view of such beliefs they have no confidence in themselves, and see little point in making efforts to prepare themselves to improve themselves for future success. Social life for them often takes place in the street and street corners. Home plays relatively less significant part. Their child rearing practices are unique. Prothro (1966), for example, has shown that parents from socially deprived families demanded immediate obedience in their children, gave little affection or reward, if their child performed tasks, believed in physical punishment and spanked children often. They were inconsistent in their demands and were authoritarians.

The environment of the socially deprived has its own effects upon the intellectual, motivational and emotional aspects of children. It is well known that children have adults as 'models' and tend to follow the same line of behaviour and opinion. They also follow the 'norms' of their social group. The experiments of Sheriff and Ash regarding 'conformity to group norms' are proofs for how these children imbibe slum culture. When these children enter school, they enter a different environment which

demands 'different' standards of behaviour. Teachers look down and frown upon their behaviour and they may brand some of their behaviour as delinquency (eg. truancy) and their lack of interest in books, a sign of low intelligence. Piaget (1956) says that a child from circumstances depriving him of substantial portion of variety of stimuli which he is maturationally capable of responding to, is likely to be deficient in the equipment of learning. In addition to restriction in variety from the low socio-economic environment, the segments of stimuli made available to these children tend to have poorer and less systematic ordering of their sequences. Hence they became less useful to the growth and activation of cognitive potential.

Stimulus deprivation is found to have effects on both the formal and the contentual aspects of cognition. By 'formal' is meant the behaviour by which stimuli are perceived and responded to. By contentual it is meant the actual content of the child's knowledge and comprehension. Formal equipment would include perceptual discrimination skills, the ability to use adults as sources of information and for satisfying curiosity, and establishment or expectations of reward from accumulation of knowledge from task completion. Examples of contentual equipment would be the language symbolic system, environmental information, general and environmental orientation and concepts of comparability relatively appropriate to the child's age level.

According to Piaget the differential attitudinal set toward learning may be the resultant of the interaction between formal and contentual levels. Extreme case of stimulus deprivation may cause temporary and permanent disorganization of child's personality.

In the learning process in general, the issue of adult-child dynamics in establishing the basis for the later learning process is important. In the case of socially deprived children free adult time is not available. Homes are vastly crowded, economic stress is chronic and the general educational level is very low. Questions from children are not answered; and they are discouraged on the contrary. Adults are too preoccupied with the business of just living and surviving.

Another important aspect of child's learning process is the language symbolic process. Cognitive development is intimately connected with language development. Language development evolves through the correct labeling of the objects in the environment. In this process, appropriate words for relating, combining and recombining of the concrete and abstract components in describing, interpreting and communicating perceptions, experiences and ideational matter, play important parts. Children from socially deprived group are definitely handicapped in this regard. When these children enter school they confront a different environment. It is in this context that Hebb-Hunt's Incongruity Dissonance Principle becomes important. According to this principle individual organisation

is an information processing system which operates like an error actuated feedback. The error is derived from the discrepancy between receptor inputs of the present and the residues of the past experience which serve as the basis for anticipating the future. What is considered as motivation and attitude are the products of current sensory inputs interacting with residuals of earlier experiences. The residuals of earlier experiences are considered to gain sequential organization. Grossly incongruous inputs disrupt this organization. While slight degrees of incongruity lend interest and are stimulating. What is seen as no motivation and negative attitudes in children from socially deprived groups are instances of new environmental encounters which are grossly incongruous with residuals of their prior experience in their home and community environment.

Society also negatively evaluates the socially deprived. The mass media, the journals, and novels portray the persons from these groups either as problems or as comical characters in terms of the dress they wear or language they speak. They are also treated differently at the main points of contact, at the shopping centres, police station, hospitals and schools.

Merton (1957) gives modes of behaviour of negatively evaluated people. He speaks of two goals, namely 'mobility' and 'wealth' to which different people react. According to him those who reject the goals but accept the means are

rejecting them in a ritualistic way. Those who accept the goal but reject the legitimate means are 'deviants'; those who reject both are 'retreatists' and finally those who reject both and substitute or alteranate goals are 'rebels'. The apathy and withdrawal tendencies of the Scheduled Caste and Scheduled Tribe groups resemble Merton's 'retreatists' reaction. The ritualistic reaction resembles the quiet desperation of these groups who outwardly confirm to the society but have given up any hope or desire to attain success. The antisocial reactions may be explained in terms of 'deviance' postulate applied to their structural position.

The nature of socially deprived group thus far explained may be summed up. The children from these groups chronically suffer from stimulus deprivation and their cognitive, emotional, and motivational aspect are characterised by dissonance causing anxiety in school situation and ultimately making them adopt 'retreatist' or 'rebellious' behaviour, because of not being able to achieve the goals set by the schools in general, which middle class or upper middle class maintain.

Strategies for Education of the Socially Deprived

1. There must be facilities in the school to compensate for the stimulus-deprivation at home and the social environment. This can be done by compensatory education in the same school set up, in terms of video programmes, hobby centres etc., and which should be made available during leisure time and holidays.

There is need to build hobby centres like Pioneer palaces in U.S.S.R. where children from 6 to 13 are taken and let off twice a week. In this connection mention may be made of starting of a Planetarium and a science and technology centre in Madras for the use of children in Madras and outside.

2. The books prescribed, subjects taught, and examination system should be more or less the same for socially deprived or socially handicapped. There is awakening at the university level and colleges are given autonomous status. Similar idea of giving autonomous status to schools should be thought of. The curriculum should be such that there is stress on functional education.

3. Attempts should be made to bridge the gap between, what is taught in the school and what the children experience in their home and community environment. In this, education of parents (adult education) becomes important. For children who come under Approved Schools, provision is there for imparting education upto secondary school stage. These children come under mainly backward, and Scheduled Castes, and the category of the poorest of the poor.

The curriculum in general for these class of children should be same as for socially deprived. However, with the attitude of society towards socially handicapped being negative, the job opportunities for this category of children are almost nil. Therefore, their curriculum and vocational education should aim at self-employment.

Socially Handicapped

In 1985, Parliament passed the Juvenile Justice Bill, which is an improvement on the Children Acts of different states, operative since 1921. Under Children Acts, destitute children were treated as delinquent children. Now we have Juvenile Welfare Board to deal with destitute-children and Juvenile Homes to house, feed, teach and train them. Delinquents come under Juvenile Justice system, which includes, Juvenile Police, Juvenile Court, Probation System, and Approved Schools. States like Tamil Nadu have Juvenile Guidance Bureau attached to the Juvenile Courts.

The delinquent children, whose ages range from 6 to 18 in the case of girls and 6 to 16 in the case of boys when they are institutionalised in Approved Schools, and are normally given education upto Secondary grade level, they are also taught vocations. However, the syllabi for these children are the same as that for 'normal' children. With the certificates from these schools, securing appointments becomes difficult for the boys and girls because of stigma attached to these institutions, though Government orders clearly state they are eligible to compete for jobs open to all. The children, who are destitutes or delinquents also belong to socially handicapped groups and suggestions offered for socially handicapped children hold good for these children also. In addition to this, the curriculum and vocational education given to them must be such as to

prepare them for self-employment. This is important because the attitude of the employers, both in private and public sectors, towards children educated and trained in Approved Schools as mentioned earlier is negative.

Individual Record.

The class teacher dealing with these groups of people should study each child and maintain a record.. This record should contain, besides the school marks a whole section on the home. This requires the teachers meeting the parents in their homes, to find out the home environment, how the child is occupied outside the school, his relations with parents, brothers, sisters, friends, his interests, problems, etc., and how the parents are employed and otherwise occupied, their interests and problems and in particular, their attitudes towards the child and the school.

Understanding of the home environment is important, for the home embodies, more often than not, traditions and values completely different from those of the school. School, means to the child new ideas of discipline and hygiene, equality between men and women, and of freedom and democracy. The child with capacity for easier adoption may even look down upon his parents with their different habits. If school and home are in conflict, the child is torn as under. Then, reeducation of home becomes, important. The teacher, here, has a vital role to play in bridging the gulf between home and school. Educating the adults becomes important.

Extra-curricular Activities.

Education, as is well known does not stop within the four walls of the school buildings. Activities like games- both individual and group, Youth services and Youth movements like scouts and guides become important. Along with these go health care with emphasis on preventive health service, providing nutritious food, and guidance - educational, vocational and psychological.

Curriculum.

Immediately after the formation of the country of Israel, Israel government was confronted with multiple problems related to education of the poor, and illiterate immigrant children. Their experiences will be useful to us in framing curriculum for the groups dealt with in this paper. In forming the curriculum, Israeli Government has taken three aspects into account (1) Heterogeneity of school population (2) Integration of the curriculum (3) Informal education.

Heterogeneity of the school population was dealt with in two ways; (a) By giving different syllabi to different children, and (b) by giving the same syllabus but with different treatments according to the background of the class. The first method was tried for more than a decade. Having different schools for special class of children though facilitated easy admission, retention of the children became difficult. The heterogeneity among those groups was still there and with the result, there was heavy wastage.

The Integration Method was adopted and techniques for implementation of this method were suitably changed. For example, in assessing the attainment, taking into account different aspects of the children was considered important. Accordingly, in addition to academic achievement, other aspects were given importance. A child for example, was evaluated in terms of its interest and effort, and rate of progress. Other well developed qualities were found to be important and of permanent value than any compendium of knowledge.

Integrated approach to the teaching of socially deprived and socially handicapped is recommended. Integration involves not only conditioning of the child with certain set of educational objectives, but also development of personality of the children towards activity directed at individual and social goals. There should be more emphasis on motivation and formation of system of values, and on integration of the personality of individual children with objectives and goals of education. Integration is a continuous process from childhood to adolescence, enabling it to continue during adulthood, even though the child may leave the school. For this the integrated approach should take into account scientific and technological development on one hand and the religious and other traditional beliefs imbibed by the child from the home and the community environment, on the other.

R E F E R E N C E S

1. Beatrice and R. Bross (Ed) Radical School Reforms, London-Victor Gallanz, London, 1971.
2. Bentwich, J.B. Education in Israel, Philadelphia, The Jewish Publishing Society, 1965.
3. Crime in India Ministry of Home Affairs, Government of India, 1981.
4. Education Plan Policy; Ministry of Education, Government of India, 1986.
5. Hurt, G.M. - Motivation Inherent in Information processing and Action.' In O.J. Harvey (Ed) Motivation and Social Interaction, New York, Ronald, 1963.
6. Piaget J. - The Origins of Intelligence, in Children, New York: International University Press, 1956
7. Prothro, E.T. Socialization and Social class in a Transitional Society, 1966
8. Shanmugam, T.E. Community Psychology, Utsav Publishers, Madras, 1988.

TITLE OF PAPER: CHILD-CENTRED EDUCATION AS AN INVESTMENT

P.D.Hajela*

While the proportion of child population between 0 to 14 years in the total population has not been very sharply affected except for 1961 and 1971, the absolute number of children since the beginning of the century has multiplied 3 times over. The proportion has been 38.05% in 1901, 38.42% in 1951, and 39.70% in 1981. Only in the years 1961, and 1971 the proportion increased sharply. In 1961, it was 41.04% and in 1971, 42.03%.

The decadal rate of growth in the population of children was the highest between 1951 and 1961:31.35%. In between 1961 and 1971 this rate was 27.94% which means that for 20 years since 1951 the average rate of growth of child population in the age-group 0 to 14 years has been somewhat higher than the average rate of growth of our total population.

It was said long ago that "the child is the father of man" and that statement is even more valid in a developing country of today where there is a revolution

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of rising expectations amongst the people and also a political and social compulsion to expedite the various changes that are taking place. It can be nobody's view that such changes can be best taken care of only after today's children had grown and matured into an appropriate leadership. Social transition is a continuum even though it may not be as steady and stable as one may desire. Often changes take place by fits and starts necessitating sudden adjustments in the quality of leadership required to sustain those changes. This however, is only one aspect of the matter namely, the short period aspect. But there is a long period aspect too which concerns not so much with the capacity of adjustment to a suddenly emerging social situation as that with initiating and accelerating well thought-out and well planned social situations. Particularly in a country like India where we decided to plan the development of our society; this long period perspective is bound to be of great significance.

How best can we prepare the children to fulfil our hopes and aspirations in the economic, technical, scientific, social and other fields is the question. Can we so conceive their training that the achievement of long period goals at the time they have matured into youth

can be possible. The general approach should be to focus on the child from this angle and then to assure that education has so worked that this multi-faceted personality is available to the society at appropriate time in the future.

It is true that educational training need not necessarily be fruit-bearing and therefore it need not concentrate only on getting scientific and technical benefits in the shape of immediate material productivity. It can inculcate in the child qualities of sports-manship; strong sense of moral and ethical values and a deep feeling for the country and its people.

It can also enable the child to use his creativity in the field of aesthetics, drama, dance, literature, religion and philosophy.

When we talk of basic or vocational education or of education through work experience, we imply that focus on child education could be fruit-bearing both for the child and the society. Obviously expenditure on such education is a kind of investment.

Implicit in our approach to basic education is the assumption that first of all the child when he becomes an adults should be able to manage and assure for himself a supplementary or principal means of livelihood. This was

Gandhiji's feeling and this would also seem to be at the back of our minds when we frequently emphasise vocational education as against general education.

While discussing the investment aspects of child education, it is desirable that we try to have some ideas of the economic changes which the nation is planning to bring about.

It is by now very well known that inspite of the industrialisation of the last 30-35 years and the resulting growth of cities, about 70% of our population still continues to be dependent on agriculture. It is true that on account of the performance of infra-structural and service sectors; the rate of growth of industrial production has of late picked up a bit. Even so that growth is unlikely to be so rapid that the existing pressure of pressure of population on agriculture would be more than marginally reduced. Therefore, the problem of unemployment in India may need to be solved within the para-meters of the rural economy and not so much outside these para-meters. But whether this means that self-employment will be a remedy for unemployment cannot be said.

Of course wage employment is itself possible if the farming is of capitalist type and on a large-scale. But such a large-scale farming tends to militate against our social objectives. On the other hand, provided the measures of land reforms concentrate on an effective application of land ceiling decisions, we can only hope for employment generation through the medium or small-scale farming. It is not clear if such a farming would be able to generate large-scale wage employment. Altogether therefore, one can conclude that the option of large wage employment in the farming sector is not very open.

(In one situation, namely, that of sharp increases in farm productivity in agriculturally backward states, rapid increases in employment in farm sector particularly wage employment can be visualised, provided of course all the various inputs which are required under new technology such as education, credit, fertilizers, seeds, good managerial, administrative and marketing facilities are available. However, until that happens, the scope for wage employment will be limited only to non-agricultural activities within the rural areas. The industrial growth centres which have been working have had their focus more biased in favour of urban and semi-urban areas than in favour of rural areas. However, since in the context of the latter, we

can only think of low-key industrial activities rather than high key large-scale production, industrial self-employment can certainly be promoted but not so much wage employment. In this sense, the emphasis on basic education for children will be a very desirable emphasis indeed and expenditure on such education can be legitimately called an investment.

But this would imply that child-education is an investment only in so far as it prepares children for employment or self-employment. This would indeed be a very narrow view to take. Even if a child grows into a good political or social leader, or a good researcher, a good artist, a good sportsman, a good musician or dancer, all these would be a gain to our country. Economic development is no more important than political, social, literary and cultural development and while planning education of children only an all-round development of the child should be taken in view. This is because as long as a person is a child, it is difficult to know with exactitude the potential that will ultimately bloom from the fertility which is concealed in him. With the process of professional counselling and guidance and aptitude tests which have been developed, some 'clinical' assessment of this potential can be made and this certainly needs to be expanded. But even then there could be many concealments

which would come up only in course of time and develop into unexpected high class competence. In such a situation; the education of children should be more concerned with a training which prepares the grounds in which any kind of creativity economic, social, political; literary or artistic can show itself up.

Where is such a ground to be prepared? Is it in schools or in special agencies like Balvadies, family, child welfare, training centres or similar other places? Always the best place for preparing such ground is the school itself. Some how for lack of resources and for lack of competent use of these resources, school education in India has suffered so much that the new education policy has now to think of emergency measures like Operation Black Board etc. Such an operation can be a powerful instrument for rehabilitation of school education provides it does not get bogged down into the same kind of difficulties which had eventually led to its deterioration in the previous years.

The working paper for this seminar underscores the necessity of developing suitable modules according to the individual potentialities, needs, growth and development; interests and aspirations, personality characteristics; family background and resources etc. and integrating these in terms of progress recorded and experiences gained through comprehensive internal evaluation.

One could say that this is also in a nutshell the purpose of child-centred education. The only question is whether such an education would not require preparation of a huge number of modules theoretically almost as large as the number of children to be educated and whether this could be possible without a commensurate increase in the number of teachers.

It is possible that the tradition of child-centred and activity-based education could not take off and degenerate instead, into a stereotype; authoritarian education by rote not only because there was little awareness of its potential but also because it required a very favourable teacher-pupil ratio. Even if a teacher has to be facilitator the individuality of a child has to be identified and fostered. This requires that for a teacher to do his job satisfactorily there must not be more than a reasonable number of pupils under his care.

The question is whether with one teacher school which we have tended to create in many parts of the country, it can be possible to bestow individual attention without which child-centred education may not be effective. True; often the teachers are not appropriately motivated and do not take their job in a spirit in which they should.

They show mercenary tendencies and are not imbued with that sense of mission which are teachers they are supposed to have. But the ever growing number of children in India and the constitutional commitment not yet fulfilled inspite of efforts to universalize primary education and universal retention of children upto fourteen years of age are likely to put great pressure on the teacher-pupil ratio.

There are three broad elements in the child-centred education programme of the New Education Policy. The first one is just to let the child be himself or herself with the teachers just watching the child's interest and behaviour the second is to assist the child build up his interest in terms of his potential for creativity. The third is to identify the child with scholastic propensities and to put him in the traditional stream with added attention.

Somehow each one of these would require treatment of pupils as individual saplings with commensurate individual treatment and attention.

The working paper suggests that 'effective implementation of suggested educational strategies to fully develop the potential in the child will depend to a great extent, on the nature of interactions that take place during the

process of transacting the curriculum in a school system between the pupil and the teacher, teachers and educational administrators, and educational policy makers and policy makers with societal forces and parental groups in particular,

This is absolutely alright as far as it goes but what about the teacher-pupil ratio whose significance is no less important because unless it is possible for a teacher to bestow individual care on each child, the process of transacting the curriculum and indeed many other processes could be non-starters or could be bogged down under the pressure of numbers.

The National Policy on Education - 1986 observes 'At least two teachers, one of whom is a woman should work in every school; the number increasing as early as possible to one teacher per class'. This is a very encouraging assurance but the extent to which it will help in the fulfilment of the goal of child-centred education will depend upon the extent to which this means worthwhile improvement in the teacher-pupil ratio, particularly such improvement as enables an approximation to a critical minimum.

A major problem that we have to solve in this connection is the allocation of resources as between school education

on the one side and the rest of education on the other. The problem has been familiar to educational planners and policy makers all these years since Independence. The problem in effect is a reflection of our inability to decide where exactly the building up of human capital in India should begin. Thus far the picture has been either unclear or/a kind in which the start of the process of investment in human capital could be fixed at any stage of education. The decisions have been taken in an **ad-hoc** manner rather than in terms of a well-thought-out theory and policy of education. In consequence, the Universities complain that since the input which comes to them from below is itself not of a higher quality, they cannot be blamed for a low quality output. Possibly a similar complaint would come from the institutions catering to secondary education.

The truth of the matter is that investment in human resource development should begin from the very beginning.

Having said that however, on the assumption that all talents have to be fostered and exploited no matter whether they are directly fruit-bearing or not, we cannot lose sight of a very severe dilemma that we face in respect of availability of resources in the country. After all whether it is investment in non-human capital or in the

human one, unless the resources are available, the investment would prove to be inflationary. We are aware that governments can get over this problem by printing notes. But that is a sure road to inflation which has its own consequences for real growth rate and real resource generation. All this implies that we have to try to cut the coat according to the cloth and that if more than one coat is to be prepared then a certain priority in between the coats has to be determined.

It is here that the problem really becomes very tricky. If we neglect higher education and research intensity of that education suffers, for that reason that will not be helpful in increasing the productivity and growth and general economic well being of our people. On the other hand if we go slow on primary and secondary education we are likely to weaken the general foundations of our society.

There cannot be any ready-made a-priori solution to this problem. It will have to be found through a process of trial and error.

However, it can still be possible, apart from decisions in respect of priorities in education, to give education a much better priority than it has been able to receive in the country. After all, there is much expenditure

both public and private which can be avoided and therefore diverted to investment in human capital at the various stages including the stage of child-centred education. The proportion of expenditure on education in the country in relation to our GNP is certainly much lower than what it should have been. If we regard 6% of GNP as a desirable proportion, we are spending almost half of it on our education today. Since the present government began focusing on new education policy, this proportion has certainly been picking up. However, we still have to go a very long way if we have to claim that commitment to investment in human capital in India is really seriously meant.

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TITLE OF PAPER: CHILD CENTRED EDUCATION : SCIENCE EDUCATION

c B.Ganguly*

A unique feature of the National Policy on Education (1986) is that it professes, among other things, child-centred education. It also underscores the need for strengthening our school science education. It is important that we examine both of them together, for with respect to science education, child-centred education means a radical departure from the content and character of what is learnt by children in the school and out of it.

The attention of curriculum developers has so far been focussed on the ever growing factual information on the pretext that the doubling period of scientific knowledge is reducing at an unprecedented rate. The growth of factual knowledge and theoretical scaffolding, therefore, has dictated that new facts, theories and concepts should load the curriculum with disjointed information, definitions and unending series of technical terms which is to be reproduced by the learner on demand. In other words, the so-called demand of the subject matter has dictated the nature of what is to be learnt.

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Science, however, is not only a body of knowledge, it also embodies a means of acquiring and organizing knowledge. Science education today, therefore, calls into question what we thought to be the aim of science education.

Science is a human endeavour and has developed only through the human faculties like thinking, raising honest doubts, questioning of the prevalent beliefs and searching for logical answer. Teaching of science without any attempt to develop these qualities has led to the creation of generations who are incapable of thinking, do not have the courage to question and cannot approach a problem methodically to arrive at logical decisions. One generation that studies science only to pass examination prepares the next generation to do well in the examination. This is continuing for generations.

The child is not a miniature adult. Its mental faculties and intellectual abilities develop as it grows. A curriculum that takes this into cognizance and encourages the learning style of the individual is a true child-centred curriculum. Children are an enthusiastic lot. They want to know the unknown. They ask innumerable questions on various things and occurrences which they observe but do not understand. Instead of a didactic mode of teaching or lecturing, it is possible to create teaching/learning

situations through activities so that children can learn at their own speed and in that process, learn the most important thing - how to acquire knowledge? All such activities can be organized for various age groups and instead of restricting education to possession of knowledge, it is possible to extend it further to participation. But all this means that a lot of cargo^{has} to be jettisoned and that there should be a good deal of sacrifice of the specialist's amour propre.

As laws and principles of science operate equally in all kinds of environments, it is possible to teach science effectively in both rural and urban environments. In our country, rural children have more experience about the environment than the urban children. It is possible to codify those experiences and create scientific attitude in them. Activity-based and child-centred learning alone can create scientific literacy which is essential for bringing changes in the socio-economic condition .

Keeping these in view, as recommended by Yash Pal Committee (1986), NCERT has identified seven dimensions of scientific literacy and efforts are being made to reshape science education accordingly. It is hoped that it will serve the cause of both general citizenship and production of manpower to participate in various areas of national

development where science and technology are involved. The identification of entry behaviour and terminal behaviour will help the teachers to transact the curriculum according to the need of the child. But proper training of teachers, together with supply of resources, are needed for effective implementation.

TITLE OF PAPER: ROLE OF A CAREERS TEACHER IN MAKING
SCHOOLING CHILD CENTRED- AN EMPIRICAL
STUDY

Gunamrit Kaur*

Child centred education is characterized by its emphasis on all round development of the child where all educational activities are directed to enable a child to discover his talents, sharpen his abilities, develop his physical and intellectual potentialities to the fullest, develop his social skills and foster his emotional well being. According to this approach schooling should be based upon the needs, interests, aptitudes and abilities of the child. The school is the major institution set up by the society for the individuals development - intellectual physical; aesthetic, moral, social and emotional. However the teacher of today already overburdened by the curriculum load; brought about by the explosion of knowledge, is able to cater mainly to the development of the cognitive aspects of the child. Also with an increase in the school going population the individual student tends to be lost sight of in the school and the classroom. In consequence there

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is a need for a special service which can help the child understand his potential and his limitations and point out those myriad opportunities within his capabilities. This would help the child soon to become an adult-chart a course based on this self knowledge that will make the entrance into the adult world easier, more profitable and more satisfying. This special service comes in the form of school guidance services which is an integral part of the educational process.

The basis of any development is not dams and power stations and industries but the people who are going to build those dams and run those industries. Guidance services contribute significantly to the development of this human potential which is the richest resource of the nation. The NPE-86 has recognised that a human being is a positive asset and a precious national resource which needs to be cherished, nurtured and developed with tenderness and care, coupled with dynamism (NPE-86, p-2)

Guidance services need to be administered by professionally trained personnel, if they are to have any impact on the education of the students, at the school level. However fully trained guidance workers may not be available to the entire school going population. Therefore a via media to provide at least minimal guidance services to school

students has been found in the work of careers teachers. A short term inservice training is provided to trained secondary school teachers, who after undergoing training are appointed as careers teachers.

Guidance services include those of Orientation, Pupil inventory, Information Counselling, Placement, Follow up, Research and Evaluation. The major responsibility of a careers teacher centres around the Orientation and Educational and Occupational Information service while providing the other services to the extent possible. Some of the activities which come under the purview of a careers teacher include the following :

- Setting up of a guidance corner
- Maintenance of guidance records
- Collection, compilation and dissemination of occupational information
- Coding and filing of guidance literature
- Delivering educational and vocational talks
- Preparation of visual aids and their display
- Arranging visits to work places talks by experts and film shows
- Identifying problem cases and collection of preliminary information for counsellor for counselling purposes.

Formal training of a careers teacher in procedures of educational and vocational guidance is imparted to school teachers; which is sponsored by State Bureaus of Guidance or State Council of Educational Research and Training at different places in different states. It ranges between three to four weeks duration.

The Department of Educational Psychology, Counselling and Guidance, NCERT, also organizes training course of 28 days duration to train careers teachers. It is visualized that these trained teachers would organize basic guidance services in their respective schools, which would lead to qualitative improvements in the educational inputs organized by schools for the all round development of the personality of their students.

By December 1987, 3 training courses had been conducted by the NCERT in the Department of Educational Psychology, Counselling and Guidance and a total of 110 school teachers from the educationally backward minorities managed schools from all over the country had been trained as careers teachers to impart basic guidance services.

A study was undertaken by the DEPC&G, NCERT as a follow up of the training provided to school teachers to ascertain the extent to which the trained teachers were able

to carry out guidance services in their schools and the successes they were able to achieve and the problems they faced.

The methodology followed to achieve the objectives of this study of careers teachers was limited to specially designed questionnaire mailed to all the teachers who had attended the careers teachers training course of the NCERT. The responses of these teachers were content analysed to know their viewpoints on successes achieved in implementing guidance services and problems faced in this regard.

Findings of this study indicate that 93.33% of the respondents had initiated some guidance related activities in their respective schools, with activities related to Information services accounting for the largest number of responses followed by counselling related, orientation related, pupil inventory and placement and follow up services in that order.

Orientation services included orientation of students, teachers and parents, creating guidance consciousness at different levels. New comers to the school were also given orientation talks to help them adjust to their new physical surroundings, to get acquainted with various facilities provided by the school and to learn how to use them.

Pupil inventory service was carried out by some of the respondents through the maintenance of cumulative record cards of the students. These record cards throw a light upon the scholastic achievement, interests, aptitudes and abilities of the child.

Information was disseminated by the careers teachers through a number of ways which included morning assembly, Bulletin board displays, class and career talks, talks by experts and field trips. Information service plays a crucial role in enabling the child suitable decisions regarding his educational and vocational future. The complexity of the individual and of the world of work as also the complexity of the factors which need to be taken into consideration in the making of educational and vocational decisions and plans makes it imperative that the student be given help in this area. In the modern era which lives and breathes information, it becomes very difficult for the school child to stay informed and the more so because parents and teachers cannot be of much help since they themselves do not have sufficient information regarding these matters. This is where the careers teacher comes into the picture and plays a crucial role in providing this service to the students.

The responses of the follow up study also indicate that the careers teachers did not limit themselves to providing educational and vocational information to the students but went much beyond that Assistance was given to the students for the selection of subject streams on the basis of past achievement, interests, aptitudes family background, educational facilities available, employment opportunities. These are important factors to be taken into consideration to select a subject stream which is best suited for the student.

The careers teachers also provided individual and group sessions to the students as a part of the counselling services students have to make adjustments to their own inner stirrings, fantasies, aspirations, fears and anxieties, jealousies, frustrations and aggressions. Failure to resolve problems and make adjustments tends to lead to emotional and social maladjustment, conflict with the school authorities, interferes with learning resulting in underachievement, truancy, or dropping out and consequent unrealized potentials. A careers teachers can to some extent help students not only to find solution to immediate problems but also help them learn techniques of adjustments which can be used in other life situations. Although solving problems and making adjustments are very basic to the entire process of living, the school curriculum provides little by way of learning experiences in these important areas.

Placement and follow up services were also organised by some of the careers teachers.

All these activities focus on the different aspects of the development of the personality of the child.

Respondents of the follow up study also perceived an encouraging attitude of Principals, fellow colleagues, and students towards guidance related activities organized in schools. Without the psychological support of these groups it may not be feasible to organize guidance or for that matter any activity in the school system.

The responses also indicate that efforts have to be made to provide reasonably adequate facilities for carrying out the guidance services. These facilities include space facilities, allocation of funds for guidance in school budget and special periods in the school time table.

Findings of the follow up study provide adequate evidence of the efforts being made by the careers teachers to organize guidance services in their school set ups. Guidance services are an essential component of the school education at all levels for the all round development of the child.

TITLE OF PAPER: CHILD CENTRED APPROACH IN PRESCHOOL EDUCATION-
IMPLICATIONS FOR PRIMARY EDUCATION

Amita Verma*

The National Policy on Education (1986) has given the highest priority to reforms in primary education in order to ensure universal retention of children upto the age of 14 years. As one of its main resolves, the policy has emphasized a child centred approach at the primary level of education.

It is imperative to understand what a child centred approach involves. The key concepts of child centred approach are :

- aim at the development of the total personality of the child.
- activity based programmes with alternative teaching strategies.
- discipline through guidance.
- the pace of learning be set based on children's needs and abilities.

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- non directive teaching - teacher's role as a facilitator in learning and development.
- maintenance of positive human relationships between teachers and pupils.
- provision of maximum opportunities to communicate on a one to one basis, between teacher and children.

But, above all, the central focus of the child centred approach is play; which has led to the practice of the play way approach. Children learn by experiencing, exploring and experimenting with the environment. It is play which provides ample opportunities for these experiences.

Advocaters of early childhood education and child psychologists have constantly emphasized that play is a way of life for the child, it is the highest form of the development of the human being Froebel (1912) said play is the child's way of interacting with his environment; his work and his job (Kergomand, 1838 - 1925) and further more, the nature plants strong play propencities in children to meet certain basic needs of development (Gessel & Ilg 1946).

The basic nature of child's play lends it-self to its use as a mode of learning (Costine & Banet (1987) Hutt, (1979).

- The child indulges in play with utmost seriousness and purposiveness.
- The captivating property of play helps him to concentrate on it.
- It is indispensable since the child considers everything he does as playful.
- It is an immensely satisfying experience.
- The spontaneity with which the child plays, makes it easier for the teacher since she need not introduce or teach the child to play.
- Qualitative as well quantitative learning takes place through play.
- Play ensures that learning can be a pleasure and not a drudgery since it is the most enjoyable activity the child indulges in.
- The player has the potential control over the play material and situation, thereby aiding learning better (Rearden, 1974).

This being the nature of play, it has immense value when carefully converted into a learning experience, as well as in fostering a wide range of developmental changes. The age between 2-6 years is the first stage and perhaps the most crucial stage in the life, where a wide variety of learning experiences through child's play can achieve a great deal in equipping the child to deal with his environment effectively, in later years.

Tizard (1972) emphasizes that the play way approach, as used during the preschool years, can assist the child in learning at the primary school. The extension of this method at primary school level helps to maintain a unity & continuity between what goes on in pre-school setting and what happens when the child enters the mainstream of education at the primary level.

Therefore, it appears that the continuity of the child centred approach is of paramount importance at primary level since, when the formality of the primary school bears upon them, the children seem to falter and find it difficult to cope with the burden of the curriculum.

Certain implications, drawn by Hutt (1979) with regard to the play behaviour of children, which lend themselves to appropriate planning of learning situations are enumerated below :

Children's play behaviour can be divided into three categories

- EPISTEMIC behaviour which leads to acquisition of knowledge and information. Epistemic behaviour is exhibited in various ways such as problem solving, exploration and productive thinking such as behaviour in

terms of acquisition of skills. Activities which give children opportunities to exercise these abilities will bring out valuable learning and developmental outcomes. Eg. Science experience where the child is given the material to handle and learn principles through it.

- LUDIC behaviour is geared towards having fun and enjoyment but has many advantages such as developing skills in symbolic interpretations, innovativeness, perseverance, understanding social roles and fantasizing which in turn lead to gaining insights in dealing with his environment effectively. Eg. creative dramatics, fine arts and performing arts.

Games with rules. which develop at a later age have many social value, such as cooperative behaviour, sportsmanship; competitive spirit and other social skills. Eg. Games with Ball and bat, indoor games like chess etc.

When suitably used, these behavioural tendencies in children lead to certain developmental changes which can be valuable for primary school learning. Some of these changes can be mentioned below -

Physical competencies such as a neural and muscular coordination, maintenance of physical equilibrium leading to smooth harmonious series of bodily movements and consequent skills in physical activities.

Cognitive skills such as moving from subjectivity to objectivity; seek cause effect relationships; ability to analyse synthesise and gain access to logic; skills needed for school such as observation, creativity, perseverance, manipulative skills, to combine letters and words to formulate ideas; quantification; ordering, pairing necessary for learning mathematical concepts; verbal expression and transition from sensori-motor intelligence to symbolic thought.

Socio-emotional skills such as acquiring and expressing self-control and approved modes of social and emotional behaviour and expressions.

Valuable as these components of development are, they need to be nurtured during the primary years; in order to aid in the learning and adjustment that children make.

Modifications required at the primary level for a child-centred approach.

As envisaged in the National Policy on Education (1986) primary school education should be geared towards inculcation in children of various attitudes & values, imparting skills and developing the inherent potential in children to meet the future challenge of life.

The policy states that "curriculum and methodologies of learning have to be vastly modified to bring in elements of problem solving, creativity and relevance".

Curriculum planned should aid in such psychological insights, democratic awareness and above all should be rich in cultural attainment apart from developing academic skills in children (Hymes, 1968). It should be viewed as a dynamic process of interaction between the pupil and the teacher. The curriculum, idealistically should help the pupils increase their sense of individuality by achieving the necessary skills and to some extent, become masters of their own destiny.

Curriculum has three major dimensions - matter, method and materials (Grant 1972).

Matter is the content of subjects, or syllabus as we usually label it. It includes all the subjects that are part of primary school syllabus such as language, mathematics, social studies and science subjects. Method encompasses the teaching strategies and disciplinary techniques, whereas Materials includes the physical set up, classroom organization, accessories and aids used in teaching - learning process.

These aspects of curriculum need to be considered from the point of view of a child centred approach in primary schools.

I. Matter With reference to the matter, that is the content of the curriculum, modification need to be effected keeping in mind the relevance and appropriateness of the content to the children's anticipated future gains in terms of skills, abilities, attitudinal and value changes (Grant D, 1972).

- Hutt's (1979) classification of children's play behaviour - the epistemic, the ludic and the games with rules that the children play can be incorporated into the curriculum since these have valuable learning potentials.

" - The concentration while planning the subject matter should not only aim at specific academic skills but towards general cognitive and socio-emotional skills in children. For this, the ludic behaviour, that is the behaviour which is geared towards enjoyment basically, but develops skills in innovativeness and creativity have to be encouraged in children. For this the curriculum needs to contain many creative activities, fine arts, performing arts and so on,

- For socializing children, in order to develop sporting spirit, cooperation and other skills for group living, games with rules must become part of the school curriculum.

II. Methods While considering the methods and teaching strategies, it should be kept in mind that the entire concept of the child centred approach lies in the way the subject matter is imparted to the children.

- The methods should emphasize activity based programmes, one of the most important elements of the child centred approach.

- The day to day classroom instruction should reflect a balance between teacher directed activities and children's participatory activities (Frank & Kessel 1972).

- The instruction time may be divided equally between teacher's direct instructions followed by children's personal involvement in manipulating and experimenting with materials and learning through personal involvement in the activities rather than the abstract oral instructions.

- Programmes may be conducted in one language but due recognition for the childrens mother tongue & spoken language is important. Flexibility needs to be built into the programme for the teacher to change over to the spoken language in order to get across concepts to the children accurately (Frank & Kessel 1972).

III. Materials When we consider the materials which include the classroom organization, physical set up and aids and accessories used in the classroom, many changes are to be made in order to fulfil the objectives of a child centred education.

Most often, in our primary schools children sit facing the teacher and the black board. Most classrooms are devoid of any other material apart from basic necessities. Infact, in many schools, children are made to sit at the same desks throughout the year. No wonder schools are a punishment and a source of severe boredom for many children.

Majority of our children live in the rural areas and some of them in the tribal areas. These children are used to living in open spaces and moving about constantly. If, retention of majority of our children in schools is one of the main objectives of our education policy, major changes are required in classroom organization. Certain points, in this regard may be considered -

- Avoid classroom setting where children face the teacher and the black board throughout the day & have no scope for movement.

- Children require a variety of environments where learning opportunities are provided in order to sustain their enthusiasm. Therefore use of outdoor space too for teaching purposes is important.

- In the classroom too consider dividing children into smaller groups seated in clusters for practical work, at least part of the day. The teacher should move about in the classroom while children work in small groups and give instructions. One to one interaction between teacher and children is much easier when this is done.

- Use of locally available indigenous sources for developing material for classrooms is important.

- Older children could also be involved in developing material aids for the class. This would be an excellent practical experience for them.

IV. Teacher Training

But, the most crucial change required in order to change over from the paternalistic, didactic methods to a child centred one at the primary level, is in the teacher. These teachers are the persons who will actually implement programmes and any real change can take place only when they change their mode of interaction with children and bring about changes in the method of instructions.

The fundamental difference between a preschool teacher and a primary school teacher, is in the way she approaches the children. By and large, in Indian primary schools, the

relationship between the teacher and the pupil is very formal, to say the least. An inevitable barrier is built between the teacher and the pupils, making informal person to person interaction difficult. The large size of the class too contributes to this many times.

Since, the emphasis is to make even primary education child centred, close relationship between the teacher and children becomes imperative. Partly, this can be achieved, within the constraints of large classrooms, if the teachers develop the right attitudes.

Attitudes such as approachability, realistic understanding of childrens abilities, patience & perseverance, open mindedness, and consistency in thought & action will be required of the teacher. This requires a lot of effort on the part of the teachers, and background in child psychology, cultural understanding apart from general knowledge is a must for all primary school teachers.

Hence, teachers training should concentrate not only on subject matter, but attitudinal change as well as methods and strategy to use with primary school children in order to bring about a child centred approach to primary level. In this regard some point may be considered :

- While training the teachers in subject matter, emphasis is to be laid on relevance and appropriateness of it to be drawn out for the children's benefit.

- training the teachers in different methods of instruction using innovative techniques where children are given practical experiences and opportunities to explore and experiment, since this is a key concept of the child centred approach.

- training in discipline through guidance. The National Policy on Education strongly condemns corporal punishment. Therefore it is necessary to train teachers to use alternative techniques such as positive and negative reinforcement and so on.

- training in using appropriate techniques in approaching children. The teachers should be trained not to allow children to be passive consumers but should engage them in stimulating exchanges as often as possible (Grant D. 1972).

- the teachers' attitudes should change, through appropriate training from being aggressive instructors to only guiding influences and facilitators in the learning process of the children.

- training in the use of locally available materials and resources to the best possible advantages in classroom situation.

- training in appropriate evaluative techniques for judging childrens level of development and performance.

V. Evaluation - Regarding evaluation of children's performance, certain changes are necessary. To a certain extent, the stereo-typical quantitative evaluation common to almost all primary schools, is responsible for the proverbially heavy school dropout. Children are segregated on the basis of marks alone and no other indicators are used, by and large.

Since primary school children are too young to be judged and labelled in terms of stages of development, a qualitative measure with a quantitative one would help both the teachers and the parents to assist the children achieve better. This suggestion needs to be explored further in order to arrive at a specific method of doing it.

Conclusion

The reconciliation between the current curriculum system on one hand and the environment in which it operates, on the other are of paramount importance if our education has to reach our most vulnerable groups of children. For this,

the theoretical orientation of our primary school education should move away from teaching just academic skills and move towards providing opportunities for development of general cognitive, information processing skills, that is, child's means of "seeking, transforming, representing and using information" (Bruner, 1971).

We have sufficient knowledge that, what goes on in preschools does not seem to extend to primary years thereby causing innumerable adjustment problems for the children at primary level. But ideally "under six and over six education should share the same general flow and pattern of instruction, the basic aim being confronting children with rich stimulation" (Hymes 1968). When this is not achieved, retention of majority of our children in schools is likely to become an uphill task. Since, the policy aims to achieve these goals, the process of teaching and learning should be viewed from the point of view of the child and not as an objectives to be fulfilled by the teacher. Planners, administrators, teachers and parents, all need to join hands in this matter and help each other achieve reforms in primary education, taking the basic principles of the child centred approach and building a viable curriculum for the primary school years.

References

1. Hutt, Corinne - "Play in under fives - form, development and functions" - in Modern perspective in the psychiatry of infancy.
2. Hymes, James, J. (1968). Teaching the child under six. Charles E. Merrill Publishing Company, Columbus, Ohio.
3. M. D'Agostino; A.M. Masse Raim fault (1987). "Education for the young children" in Children in the tropics Ed. Claude Joliff. International Children's Centre Publications.
4. Tizard, Jack (1972). "Disadvantaged children and their early education" - in Curriculum in Early Childhood Education - A Seminar report, Bernard Van lean. Foundation.
5. Grant, Dudley (1972). "The curriculum in the classroom" in Curriculum in Early Childhood Education A Seminar report.
6. Kessel, Frank - "The Athlone Early learning Centre, South Africa" in Curriculum in Early Child Education - A Seminar report.
7. Child Centred Education - different approaches including behavioural approach - A working paper.
8. National policy on Education (1986) - basic objectives - a report .

TITLE OF PAPER: CHILD CENTRED EDUCATION: ROLE OF PARENTS',
TEACHERS' ATTITUDES & HOME AND SCHOOL
ENVIRONMENTS.

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In the history of generating the various vital human institutions infinite attempts might have been made to develop, shape and maintain them that have been handed over to us by our cultural inheritance. From the nomadic diad to the formation of extended family, from family to wider community or tribe, and from community to society, the development required many steps in the ladder of evolution of human society. In order to attain and perpetuate a harmonious social living, society also had to invent various essential ways of regulating and preparing for and maintaining a healthy system. Thus, the customs and regulations of family hierarchy, class stratification based on vocational skills, social regulations and control mechanisms had to be evolved and socially best serving methods and regulations had to be strengthened to be adopted finally. In this process of development of various agencies to maintain smooth social relations and prepare children to participate adequately in the expected roles as adults, formal education, available

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commonly for the children of society, had also to be provided for. This universally felt need for imparting intellectual, social and vocational skills was commonly felt in all societies in all ages and in all races. To meet these basic requirements the system of school emerged. What a school does depends on the philosophy of education prevalent at the cross-section of time in a society. The aims and objectives of education to be imparted are derived from the philosophy of education accepted explicitly or implicitly by the concerned society.

Without going into an analysis of these important philosophical roots of our education let me come directly to the main issue under consideration, viz., Child-Centred Education. In most of the approaches that are being advocated these days, and in the new educational policy too, lopsided or highly tilted approaches and total dependence on the charisma of a school is expected, as if the school alone were the main determiner of education as a whole. In the present paper an analysis is made about the role of factors within and without the school that have been found vitally significant in enriching the fruits of education and helping in the development of a healthy personality of the students. In my view following a curriculum and arranging for extra-curricular activities are the intervening or arranged

activities, participation in which leads to the development of a well socialized and healthy personality of the students beside attaining education. Formal instructions can be had individually too without going to the school at all. But where are the opportunities for interaction in a mini-realistic society, free from the predilections or idiosyncrasies and control of parents, in which under the impartial control and supervision of the teachers the children learn and experience the effects of obedience-disobedience, competition and cooperation for shared activities, the team-spirit and attempts for compensating for past weakness and failure, the experiences of fellow-feeling, commonness and belongingness with the school etc. On the completion of education most of these experiences are finally generalized over the society and its values and regulation.

Thus school is like a realistic mini-world which prepares our children to stimulate their specific talents, provides opportunities for its realistic expression along with other classmates, and creates an atmosphere of healthy competition and cooperation while following the regulations of the school.

In order to achieve the aims and objectives of education it is not only necessary but essential that all the agencies related directly and/or indirectly make coordinated efforts for this common aim of providing a wholesome education to the future citizens of the land. Healthy preparation of the future adults commences with the process of educating them from their childhood at home. It is through a prolonged sculpturing at home, school and society at large that the human child marches through the process of various stages of growth and developments culminating into maturity of every facet of his life. In order that this aim is achieved fully a concerted effort of the parents is as important as that of the teachers. Being a responsible and encouraging parents with emotionally harmonious and happy home is as necessary as requiring an encouraging, stimulating, school environment under able, devoted and involved teachers. Thus education requires multidimensional efforts to be effective.

In this paper an attempt is being made to bring out the importance of all these factors and to demonstrate their role in providing education that will lead to the development of healthy personality as a concomitant by-product of attaining formal education.

I. Readiness for Schooling:

For their first admission children are not delivered at the school as raw material. They are already a product of 5 to 6 years of home processing. So a school can start from that level at which the home has developed the child and what the home is doing to him and for him.

Before a child is admitted to a school, social, individual, and communication preparedness is to be looked into. Among these the following are important ones.

(a) Starting Age: Beginning of school education involves an emotional weaning of the child. He is to be exposed to a totally different set up to play new roles, carry new responsibility in a diverse setting. Some children take to it smoothly but not all. For many the initial phase is very distressing. Therefore, the parents should gradually make the child ready for the school. Early or late admissions to school are likely to precipitate adjustment problems for the child because he will be younger or older than others of his class. A significant difference in the age of admission, from the modal one, has been found to create many social and emotional problems for such a child (Baer, 1958; Peck & Havighurst, 1962; Montagu, 1962). Pre-school readiness is aided by nursery school and kindergarten experiences. But then it also creates no special excitement for the school

because there is hardly any difference between the two for the child previously admitted to nursery school. A starting age of 5+ is usually found sufficiently normal for starting school education at class one.

(b) Physical Readiness: Adequate physical development is a prerequisite not only for efficient motor activities but equally for mental ones. Delayed physical development is found to be associated with poor muscular coordination and delayed mental development. The child with delayed physical development is forced to face more strains and stresses in the company of his physically normal classmates in the academic, sports, and social activities (Jones, 1965; Rubenstein, Falick and Levitt, 1959). Simon (1959) found marked differences in the total configuration of body and its relationships with different parts of the body during pre 5 years to that between 5 to 7 years age and then with 7 to 9 years period. The body under 5 years is not yet ready for the type of strains to undergo in the school. But it gets ready between 5 to 7 years' phase. The American studies of Simon bring out that to be ready for first grade the child should have physical and mental ages of about 6 years and 6 months. Therefore, a physically immature child will tend to be mentally immature also. According to Simon (1959): "Physical maturity is more than skin-deep; it is reflected

not only in superficial body features but in the maturational status of the central nervous system, which in turn underlies such behaviour as readiness to submit to restraints and the application to tasks".

Any lack of readiness hampers school adjustment even during adolescence. The late maturer looks more like a child than a near adult. He is regarded as a child by his peers and hence is excluded from many social and sports activities.

Early physical maturity is not accompanied by equally faster mental maturity. Hence, it also creates allround problems.

(c) Psychological Readiness: Implies the degree of autonomy or the degree to which a child is sufficiently capable to manage his activities independent of any constant aid and guidance from an adult. The degree of sufficiency is decided by the child's age-group's expectations. Can the child adjust socially to strangers (whether they be teachers or classmates)? Acceptance of class and school regulations and mental readiness to learn what his class demands, emotional control over anger, fear and jealousy are some of the requirements. In this context it is important that such psychological preparedness can be had by proper child-rearing

practices adopted. Authoritarian parenting leads to make children less mature for their age than those brought up under democratic parenting. Permissive parenting does not help in learning to conform to rules and regulations imposed by others because it has made the child demanding and indulgent at home. An only child has also some disadvantage in the beginning in the area of social relationships at the school. It takes him longer time to adjust successfully to the school than do children with siblings (Ausubel, 1959; Livson, 1968).

(d) Reading Readiness: The children should also be able to read a bit. This makes his class adjustment easier. Reading readiness is greatly improved by good family relationships and by home environment that shows respect for and interest in written media. Late maturing children are, therefore, found retarded in their psychological readiness. Since the curriculum is planned in schools according to the expected intellectual development of the students in general the late maturers have some difficulties in meeting these requirements. The early physically maturing students also have difficulty because they find the social relationship dissatisfying in the school. This may create unfavourable attitudes toward the school (Clarke and Olson, 1965; Jones, 1965).

II. Effects of Readiness on adjustment:

Physically and psychologically ready children adjust to the new environment and role-demands of the school in time. Those not yet ready enough have emotional tensions and behaviour problems.

Some children cry when it is time to go to the school. They cling to the mother or may even vomit their breakfasts. Others seem to be abnormally quiet and worried about in suppressing the external signs of brimming up emotional tensions. These are some of the characteristic methods of responding to an emotionally tension producing situation. Macfarlane, Allen & Honzik (1954) found that children who react explosively to school at first, may in the long run, make better adjustment than those who inhibited the expression of strong unfavourable emotions in the beginning.

Children also go through a period of homesickness at the beginning of schooling. Generally adjustment maintenance is easier for the day-scholars than for those who are residents. It may also be kept in view that the pattern of adjustment to the first grade does not guarantee a satisfactory carry-over to higher classes automatically. Care has to be taken by all concerned.

III. Effect of School Readiness on Personality:

Physically and psychologically ready child tends to meet the new situation with poise and self-confidence that facilitates smooth adjustment. This success reinforces self-confidence. The unready child, with his inadequacy, finds it more tension producing. Hence his adjustment is a troubled one in his own eyes as well as of those of peers, parents and teachers.

Most of the teachers and parent should recognize these individual differences in children's adjustment efforts and they should try to ease the way by as much care as possible. Breckenridge and Vincent (1965) have summed up the situational dynamics as follows:

"If the child is quick to smile, to obey orders, and to learn school routines, he often experiences a renewal of mothering affection from his kindergarten or first grade teacher. If he is troublesome to have in the group of children, slow to fit into the routine and not particularly lovable, he may expect rebuke and further sense of isolation from the adult world".

Along with these effects of various degrees of school readiness, the child, once admitted to a school tries to do his best. Then he accumulates some experiences.

IV. Early School experiences influences the students attitude toward the schooling in general. The principle of primacy seems to operate here. But these experiences may change if subsequent experiences have been of stronger magnitude and of severer nature. In the beginning the parents and teachers try to paint a favourable image in the mind of the child, but what actually is experienced by the child leaves more permanent imprints on his delicate, sensitive and fresh mind. The effects of early school experiences become active whenever a new school is joined. There is no guarantee of complete positive transfer of experiences from school to school, class to class or age to age because of the participation of many new agents in between which are not the mirror-images of earlier ones.

A school environment that meets the child's expectations and needs produces pleasantness, and fosters good adjustment. It is the schools that are unpleasant, resentment & fear provoking and mishandling or lacking in care for students on the part of their teachers that have a damaging effect on the children's attitudes and personality development. They are trapped in an 'approach-avoidant' conflict situation out of which they cannot come. In such cases if their parents are unmindful and harsh on their children's resultant sub-average school performance then the children are likely to suffer more in shaping their personalities and school

achievement.

Education and personality development is affected by the work-environment of the schools.

V. Emotional Climate of the School:

Most parents and teachers perceive the physical surroundings and facilities only when they think how good a school is. Impressive buildings, layout, well equipped library and laboratory and good staff seem to determine the quality of a school to most people. All these are necessary requirements of a good school no doubt but the nucleus of a good school is composed of the quality of psychological environment that prevails. Teachers' involvement, job-satisfaction and an adherence to the philosophy of school fostering cohesive efforts for an all-round building of students' personality (which includes educating too) is essential to make best use of the facilities. It is this type of psychological climate of oneness of purpose that percolates down to the students and goads them in the healthy channels of activities. It creates good morale among all. Hillard (1954) long back emphasized the impact of shared emotional environment's influence in the development of a strong and healthy self-concept among its students in the following way:

"School should be a place where children are not afraid to express the feelings they have. Where mistakes can be made without embarrassment; where tears and disturbances are not disgrace; where encouragement and sympathy are offered when needed. There should be fun and laughter and perhaps even a bit of teasing. School should be a place where children are sure of warm human understanding".

If school environment is effective then it is important to find out the conditions that determine it.

VI. Conditions responsible for Emotional Climate in the School:

(a) Teacher's role: The emotional climate of a school is largely determined by the teachers. What kind of a teacher he is, how he is perceived by the students, how he perceives his role and his relationship with his students and how closely does he feel satisfied with his capacities to fulfil his role-demands? All these are important contributors to the creation of a happy, healthy and cohesive emotional climate in a school. Job-satisfaction, and job-involvement help a teacher in the smooth enactment of his roles. He is able to share his feelings of warmth with his colleagues and students. Such a teacher's favourable attitudes are contagious that easily spread around. At higher levels of education the opportunities of closer

contacts with students shrink because the students is now scholastically and emotionally more mature and capable of chalking out his activities with least supervision from his teachers. After all, the whole process of education is to sculpture the child into an autonomous, self-directing, responsible and productive being from his initial dependencies, other-directness and immaturity.

(b) Type of Discipling process: The school administration regulates directly or through the teachers the process of discipling. Authoritarian discipling is found to create far less positive emotional climate than a democratic approach. Over-permissiveness also spoils the emotional climate of the school because it is directionless. It is also a fact that when the rules are properly explained to and understood and respected by the students it leads to favourable attitudes toward the authority. Representation of some students in the discipline board create a feeling of fairness and justice among the students. This however is practicable at post-primary schools only. But it does promote healthy emotional climate in the school.

(c) Degree of Stress of Competition: A highly competitive atmosphere in a school has an unsettling effect on the emotional climate. It constantly ignites the students into rivalry. The effects of an atmosphere stressing to vie has very demaging consequences for those who fail in attaining the goal and thus it leads to a feeling of smug self- satisfaction on the part of those who succeed. Here it may be mentioned that this philosophy of high competitiveness will gradually envelop our educational system also as the country advances further in industrialization. In an industrialized culture constant cut-throat competitions are the norms of the business. Schools and colleges also reflect a preparation toward the same end. During last one decade Japan has witnessed an intolerable stress generated in this manner in their school system that has been found to be very fatal for the well being of the large majority of the students. Therefore, a highly charged competitive atmosphere is basically detrimental for building a harmonious emotional climate in the school and healthy personality development of children.

VII. Effect of Emotional Climate on Personality:

The emotional climate of the school does not only affect educational process but it influences the development of personality of the children. The effects of emotional climate of home and school are not confined to familiar and school adjustment only but also on the relatively stable pattern of behaviour. If a student has to work with persons who are generally tense and anxious due to competitiveness, poor personality adjustment or other conditions then he will also, unintentionally, fall into the same pattern. Nearly 4 to 6 hours spent daily in a school amounts to a significant period of time. Therefore, the quality of emotional climate of the school has a direct effect on the personality of the students. It is particularly more prone to be effective in the earlier phase of the formative years of a child's and adolescent's life. It can in some ways affect the early adulthood also. The early years become more sensitive for imprinting because the child ordinarily is under one teacher through the entire day, except during recess. The classmates are also the same during all teaching periods of a day. Therefore, he is constantly under the same emotional exposure.

The early phase is also more sensitive and susceptible to the influence of the teacher because the child has not yet

acquired wider experiences of life and has not yet developed the critical judgement ability. Later on, with greater socialization and growing maturity, the dependence on the teacher is also reduced. Childhood is a delicate period of molding personality too. Therefore, this phase of childhood requires utmost care,

VIII. Teacher's Attitudes & Behaviour:

Educating is done by the teachers in the school. Their attitudes and behaviour become agents of many consequences for the students. A teacher's influence on the children's personality development is second to parents only. During the early delicate, formative, highly sensitive and receptive period of rapid growth and development the significant persons that function in the psychological field of a child leave their imprints on the mind of the child. The modeling effect is operative there all the time (Bandura and Walter, 1959; 1963). The teacher-taught relationship, its intensity and temper charges the emotional climate of the class. The pupil-teacher relationship is qualitatively determined by the attitudes that the teacher has toward teaching and the taught. Mutually coherent perception leads to the interplay of a harmonious climate. When the teacher perceives the students as eager, cooperative and complying his attitudes are favourable, while perception of a student as troublemaker,

defiant and disinterested develops unfavourable attitude toward him. Students attitudes toward the teacher, whether positive or negative, are rebounded by the teacher. However, at higher class levels a qualitative change takes place in the teacher-pupil interactions. It tends to become more formal too. As a matter of well documented fact a stage comes when the young adolescents develop a sort of hero-worship for their preferred teacher (Chausky, 1958; Christensen, 1960; Medléy, 1961; and Yando, 1968).

Recently Joshi and Singhvi (1985, pp. 107-409) investigated the characteristics of teacher, taught and teaching from primary to college level vis-a-vis their personality characteristics. They used the Hindi versions of Cattell series of 16 PF, HSPQ and ESPQ together with measurement of perception of Teacher, Taught and Teaching by S.D. technique.

(i) The students, at all levels, attributed more positive qualities to "taught" than their teachers at the respective grade levels.

(a) Perception of teacher by teachers: The teachers and taught perceived "teacher" in a similar way at all educational stages. However, teachers self-perception was found to be more realistic than their students self-perception. Teachers

attributed more P (potency), A (activity), and E (evaluation) to "teaching" than did their students. Interesting personality correlates of these perceptions were obtained.

Those primary school teachers who perceived "teacher" as highly potent (P), active (A) and valuable (E) were found to be emotionally more mature (C+), accomodating and serious (E-), and conscientious (G+). At the middle school level perceivers of these attributes were significantly higher on sobriety and seriousness (E-), group-dependent (Q₂-) and socially more precise (Q₃+). At the secondary stage only conscientiousness (G+) factor was found significantly higher among teachers perceiving "teacher" high on P, A, and E dimensions. Finally such college teachers perceived "teacher" high on P, A and E who were themselves assertive and stubborn (E+) and had a high self-concept (Q₃+) formation.

As regards "teaching", venturesome and socially bold (H+) and conscientious (G+) teachers perceived "teaching" high on P, A and E in the primary schools. In the middle schools teachers who were high on trusting (L-) perceived "teaching" highly. At the secondary level social warmth (A+) was the sole outstanding attribute of teachers perceiving "teaching" highly. At the college level ~~assertive~~ and dominatingness (E+) characterized teachers who perceived "teaching" highly.

Among the students the following characteristics were noted.

a) At the primary level social-warmth (A+) characterized students perceiving "teacher" highly. Enthusiastic, happy-go-lucky (F+) traits went with higher perception "teacher" among the students of junior high school. But at the secondary level scholastic brightness (B+) and serious and sober (F-) students tended to perceive "teacher" highly. At the college level students who were high on conscientiousness (G+) and secure and confident (H-) perceived "teacher" highly.

(ii) Taught:

i) Venturesome (H+) but tenderminded (I+) students of primary level perceive "taught" highly. This is a projection of self-image,

ii) At the middle school obedient and conforming (E+), enthusiastic (F+) and relaxed (Q₄-) students perceived "taught" highly.

iii) Emotionally mature (C+) and high self-concept controlled (Q₃+) students of higher secondary perceived "taught" highly.

iv) Among the college students "taught" was perceived highly by those who had high self-concept (Q₃+) formation.

(iii) Teaching:

i) At the primary school socially warm (A+), tenderminded (I+) and venturesome (H+) students rated "teaching" highly.

ii) Enthusiastic (F+) and expedient (G-) students rated "teaching" highly at the middle school level.

iii) At the secondary school no special personality attribute was found to discriminate between high and low ratings on teaching. But the college students who were more enthusiastic (F+) and conforming (E-) tended to rate "teaching" highly.

Among the students it was seen that at the primary level venturesome (H+) but overprotected or dependent (I+) students perceived "teacher" and "teaching" high on P, A & E dimensions. At the junior high school happy-go-lucky (F+) but self-reliant (I-), relaxed (Q₄-) and bright (B+) students perceived highly on all the three concepts. But at the secondary level there was no distinguishing predisposition.

However at the college level high self-concept control (Q₃+) is the trait distinguishing "teacher" as well as "taught" concept responses.

Factor analysis further revealed significant differential perceptions across the four educational levels and concepts.

IX. Factors influencing Teacher-Student Relationship:

There are various factors that influence it among them the following are prominent ones:

(a) Cultural stereotype, if favourable, is conducive for positive relationships. It also enhances self-respect and self-control of the teacher. These days, in our country, the commonly used term for a teacher in popular parlance, even in movies is "master" the connotation of which is well known to all, the sense in which it is used today. The ancient concept of "Guru" has turned into a totally different connotation in a common man's vocabulary. These are disparaging portrayals. It leads to far from satisfactory image of a teacher in the minds of the public. Hence the teacher-student relationships cannot be expected to be satisfactory at all (Anderson, Anderson, Cohen and Nutt, 1959; Cohen, 1965; Schwartz, 1960). These unfavourable social stereotypes create unfavourable attitudes toward teaching as a career and a negative attitude toward teachers in general in the minds of the young ones. Every teacher is able to sense how their students feel about them. This further complicates the development of proper relationship.

(b) Favouritism by Teacher: Students perception of "favouritism" on the part of their teachers is also crucial. Usually demanding and overindulged students complain about it. Usually a better than average student in any area of activity attracts more attention on any teacher. Sometimes students belonging to poor social class complain that their classmates of upper social class get more favourable treatment. Perhaps intellectually more stimulating background of upper social class students, who performed better, attracts a teacher's attention in such cases. Boys generally tend to be more trouble-precipitating in a class than girls. If the girls are found to be complimented for their better achievement and behaviour, the boys tend to allege favouritism or partiality.

(c) Teacher's attitude: Students also sense very quickly their teachers' attitudes toward them. Teacher's interests or lack of it is also gauged by them. A good teacher is identified as one who likes his students, is interested in them as people, encourages them to work upto their capacity and to conform to school rules. He is perceived as one who is personally secure and self-assured. Such teachers are rated as poor who are perceived by their students as hostile, indifferent, unfriendly and punitive in their attitudes, lacking in understanding their pupils, primarily self-concerned

and weak in providing leadership to the students. Students generally take undue advantages of such teachers, work below their capacity and create class-room troubles (Cheong and DeVault, 1968; Johnson, 1957; and Symond, 1960).

(d) Teaching techniques A teacher's performance comes to the forefront every day and in every school period. Therefore it is the anchor on which teaching and its influence on the personality of the students depends to a significant degree. When teaching is felt as boring, the classes are dull and uninspiring, the students are tempted to indulge in starting that may appear to be exciting to them. They develop negative attitudes toward teaching and the teacher. The teaching techniques adopted may be very advanced or too simplified or very routine for the age and intellectual level of the students. A young and ambitious teacher may be tempted to use a technique advanced to the level of his students to impress them while the older teachers may tend toward the other extreme.

Classroom controlling strategy is also an important part of the process of teaching. It is usually seen that authoritarian, strict and punitive controls are disliked as much at the school as at home. Similarly very permissive and vacillating disciplining is weak and ineffectual. The students show contempt for them. It is ridiculed behind the

teacher's back. Therefore, a consistent, reasonable steady conformity has to be implemented.

(e) Teacher's Personal Adjustment and teaching efficiency:

A personally well adjusted teacher is able to establish warmer relationship with his students. According to Heil and Washburne (1961) there are three types of teachers:

(a) Turbulent, i.e., blunt, impulsive, tense and unpredictable. They tend to express their feelings and thought in verbal and physical aggression; (b) Fearful teachers are basically insecure, helpless, dependent and defensive. They become tools in the hands of their students and others; (c) Self-Controlled teachers are sensitive to the attitudes of others, they want to run the things properly, expect conformity of rules from the students. They command greater respect from the students. It should now be clear how the teacher-student relationships affect the students personality and performance.

The role of school as a shaper of personality is formidable. Teachers are next only to the parents in influencing children.

Teacher-child relationship has greatest impact in early school years. Here the teacher plays the role of surrogate parents during the school hours. With further growth in age teacher's impact decreases (which is also true for parental influence).

The child grows between the two worlds of home and school during his early formative years. If these two worlds are similar in their values, attitudes and involvement then each reinforces the other in the development of the child. The similarity between them should be between the values held by the parents and teachers, their ways of guiding and disciplining the child be consistent, general environment encouraging, and inviting individuality, patience, realistic expectations and realistic reinforcements should characterize it. If there is significant discord between these two worlds the child is pushed from one court ^{the} to/other like a poor shuttle cock, e.g., if teachers put high value on studying and parents put low value on it, the child is torn between the two, not knowing which standard he is to accept.

School is, in many respects, more important in delivering, early in formative stage of life, a miniature world experience to every student whether he is from the indulgent or rejecting parents. He is exposed to a socialization on a realistic matrix where he is expected to be encouraged for such role-enactments that are within the circumference of social and educational expectations; where healthy cooperation and competition takes place; where making a realistic self-appraisal is possible. It is in the healthy school environment

alone that the child learns self-acceptance, self-understanding, realistic expectations, possibility of repeated experiences of success and identification with healthy models. Formal education seems to be just an instrumental procedure to usher in healthy socialization.

Attitude toward education and school also influences not only achievement but also the development of personality because the child's attitude toward education and school affect his adjustment to the situation. His adjustment will influence his self-concept as a person. There is a circular relationship between the child's personality and his school. According to Hurlock (1983, p. 322) "his personality largely determines his adjustment to school and his adjustment to school greatly influences his concept of self".

X. Students' Attitudes:

A student's attitude toward his school affects the academic and extra-academic adjustments. The quality of these adjustments influences the judgements his teachers, classmates and parents make of him. Their judgements affect their behaviour toward him. The way parents, teachers and classmates treat him shapes his self-concept.

Breckenridge and Vincent (1965) found that students with favourable attitudes toward education generally work up to their capacities and make good school adjustment while those with unfavourable attitudes belong to the underachiever group and problem students. This lack of smooth adjustment reduces motivation.

Role of Family: Once formed these attitudes toward school are difficult to change. If the family helps in building up a favourable attitude, the child is likely to take it with him when he enters the school. But many parents tend to be careless in this respect or may paint a false picture of the school. It has also been found that a child generally has favourable attitude at first persisting in this first school year. Subsequently the novelty and excitement are over because of the routine familiarity. The increased experience in the school also diminishes the basic exciting appeal. According to Estvan (1959) this initial sensitivity to different aspects of school and schooling leads to a decreasing return in subsequent school years. This may be associated with a deterioration in the child's attitude toward school. Mitchell and Shephard (1967) found gradual dislike for school to develop in increasing order from 6 to 15 years of age. The child gets bored with school and a latent antagonism may develop for it. The

restrictions imposed by the school and teacher's treatment is now resented by the children. Thus the children become less fond of school than they were initially.

Attitude of Older Students: The attitudes of older students also influences significantly the quality of attitude formation in the younger children studying in lower classes. Joseph (1969) found more resentment among adolescent school children than among the primary ones. Much of the same holds true, proportionately perhaps, for the college students.

XI. Cause of deterioration of favourable attitudes:

(a) Unrealistic Image: The deterioration in attitudes may occur due to many factors. An unrealistic concept about school (as a place of enjoyment) or a false idea that schooling is the key to vocational placement etc. may be found to be non-existent very soon. Complaints about curriculum are also voiced as being out of date or irrelevant to real world. Here a readymade key to solve future vocational success and smooth sailing in life seem to be the source of such complaints because schools, colleges and universities are not polytechnics. A society needs imparting, generating and transferring knowledge on every aspect of education and not only about preparation for future jobs. The place of

art, aesthetics, literature, philosophy, history, and other subjects of humanities and social sciences are needed for their own sake to widen the mental horizons. Education is not a factory for producing technician or technologists of a particular trade for which there might be great current demand and which will not be in so great a demand after the decade due to over-production of them. Moreover, what type of technology can there be without sound knowledge of basic sciences.

But the young ones do complain because of their faulty conceptions about education as a direct royal road to vocational placement.

(b) Socialization as a factor in attitude formation: Beside these student-centred factors there are other sources that too affect attitude toward education. They affect students' attitudes too. Girls are found, as a whole and at every age, to have a more favourable attitude toward education and school than boys. Consequently they work with more positive inclination. They trouble their teachers less and rebel less against school rules. Now this difference in attitude development is not genetic. It is a product of child-rearing methods. The methods used in child-training at home influence what attitudes and behaviour the child

will learn. These are then carried to the school from home. A child with hostile attitude toward parent may transfer this hostility upon the school and teachers. If parents are authoritarian and the style of home-adjustment has forced the child to be meek and timid, he will tend to be timid in the school too. Or he may compensate for the home timidity by developing aggressive, negative and obstructive attitudes and behaviour in the school.

It has been found consistently that parents who bring up their children and supervise their activities in a permissive, positive and encouraging manner help in the development of adaptive behaviour in their children. This is likely to become generalized if school also tries similar approach (Weigand, 1957). Cottle (1968) has summed up this dynamics very aptly when states that "good parents produce good students". When parents show little interest in their children or in their schoolwork and when there is little exchange of affection, children have little motivation to do things to please their parents. Therefore, school work also suffers which culminates in a dislike for school and education. Therefore, any unfavourable parent-child relationship, whether overindulgence, rejection,

overprotection or domination, is likely to "cripple the child's chances of adjusting successfully to the school situation, either socially or scholastically" (Mussen, Conger and Kagan, 1969).

(c) Home Environment: Poffenberger (1959) found that parental attitudes toward school and education affect children's interests in schooling and studies.

What the parents think of school its teachers and its worth to the young ones in the present and for the future largely influences the student's attitude toward education, teachers and studies. Parent's attitude may increase or dampen their ward's motivation for studies (Cooper & Lewis, 1962; Harrison, 1968; and Warriner, Foster and Trites, 1966). Young children also adopt the attitude of older same sex sibling with respect to school, teachers and studies. And all this is passed on to the young one at a stage of development when he is not mature enough to or experienced enough to form an unbiased judgement of his own. Stone and Church (1968) have very aptly summarized these developments in the following words:

"Some of our negative feelings about education are early communicated to our children, making it difficult for

them to approach school with enthusiasm that is developmentally so timely. Quite early adults (especially men) convey to children (especially boys) that school is to be spoken of disparagingly, that it is something of a penal institution, that it is less an opportunity than a forced drudgery and that real life ends at the schoolhouse door."

(d) Social Class Influences: Parental attitude toward education are influenced by their social class. Middle class parents are found to lay great emphasis on the value of schooling and academic achievement as stepping-stones to vocational and social mobility and enhancement. Therefore, they encourage favourable attitudes in their wards. (Sears, Maccoby and Lavin, 1957; Stout, 1969).

Many lower class parents feel that much of the school work done by their wards has very little scope for application in the after school life and hence schooling is a waste of time and waste of opportunity for possible returns of income earned by child labour. Even in advanced country like U.S.A. the lower class parents think that^a teacher's job is to discipline their wards and hence they express no responsibility for the child's attitudes and behaviour (Kandal and Lesser, 1969). The lower class parents are equally unconcerned about their child doing his homework

and how he utilizes his leisure time at home. But the middle class parents are very much concerned about both the responsibilities, rather they overstress the child to concentrate on studies at home (Blakeley, 1958; Whitty, 1961). The upper class parents do encourage education but there is relatively less stress than in the middle class.

(e) Religion: Religious affiliation seems to affect attitude toward education among parents. In U.S.A. it was found that Jewish parents put more emphasis on education and higher academic achievements than the Protestant or Catholic parents (Cohen, 1965; Packard, 1961; Packard, 1962). Perhaps the minority group perceives educational preparedness as their best instrument for future success. In India poverty distracts many among minorities from availing schooling for their children. Child-labour is taken as an additional asset.

Ethnic differences among parents are also found to influence parental attitudes toward education. In U.S.A. lower class black and Italian parents are found to have least favourable attitude toward education. In India lower class parents across all religious groups also appear to think similarly because of discrimination they feel that there is very little possibility of their children being able to rise on vocational and social ladders.

(f) Loss of Value of Academic Excellence: Among the students of faculties of Humanities, Social Sciences and Science, academic achievement seems to have lost its appeal among the students of today. This trend was found in American schools and colleges too (Coleman, 1960). Therefore, attaining academic excellence has lost its appeal.

All these sources of unfavourable attitudes not only pollute educational process but they also produce unsatisfactory personal and social adjustment (Garrett & Haller, 1964; Rubenstein, Falick & Levitt, 1959). It leads to the development of a stable grumbling and disproportionately criticizing attitude development (Harris, 1950). Lack of favourable attitude toward education creates laxiness and lack of motivation for study. Thus, they underachieve. This is not confined to any particular subject but it affects over all studies. Intense dislike for school may also lead to school phobia and consequent trauncy. Underlying the large dropouts and school misdemeanors are these cumulative effects of unfavourable attitudes toward schooling.

It is a serious matter to note here that the attitudes toward education not only affect education but personality development also. First of all these attitudes affect school and college adjustment. The type of experiences

in student-teacher relationship and with peers an understanding is generated about people in general, of situations and of himself. It is developed in an environment that is heterogeneous in contrast to the home environment. In U.S.A. it is found that the behaviour of persons having the advantage of atleast 2 years college education is more flexible, democratic, more understanding of others and less authoritarian than those who did not have this much exposure of the college (Bloom & Webster, 1960; Jarrett & Haller, 1964; Warriner, Foster and Trites, 1966). It will be very difficult to generalize these findings to Indian situation where an opposite trend seems to prevail. The greatest direct influence of the process of education comes from the large number of opportunities for self-evaluation in terms of one's age-mates. It is done through the level of achievement, teachers' and classmates' behaviour toward him and his social and extra-curricular achievements as compared to his classmates.

Education was once considered as a symbol of status and hence has influenced in self-concept via the favourable judgements made by one's social group. Although neither education nor the teachers have a high prestige in our country yet academic achievement does get recognition sometimes. So it should be encouraged at home and at the school.

In this paper the role of teachers and parents in the process of educating a child is explained in terms of factors that have been mostly side tracked so far. The importance of parent's attitudes, home environment, school environment, teacher's attitudes and their effects on an allround development of a child's attainment and personality are reviewed. The importance of teacher-pupil relationship, factors that affect it and the conditions that influence teachers' role and students' attitudes are brought out. Given these conditions the imparted child-centred education will be most productive and creative.

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REFERENCES

- Anderson, H.H., Anderson, G.L., Cohen, I.H., and Nutt, F.D. (1957). Image of teachers by adolescents in four countries: Germany, England, Mexico and United States. Journal of Social Psychology, 50, 47-53.
- Ausubel, D.P. (1958). Ego development among Negro children. Mental Hygiene, N.Y., 42, 362-369.
- Baer, C.J. (1958). The school progress and adjustment of under-age and over-age students. Journal of Educational Psychology, 49, 17-19.
- Bandura, A. and Walter, R.H. (1959). Adolescent aggression, N.Y.: Ronald.
- Bandura, A. and Walter, R.H. (1963). Aggression. In Child Psychology, 62nd Yearbook, National Society for the study of education. Chicago, pp. 364-415.
- Blakely, W.P. ((1958). A study of seventh grade children's reading of comic books as related to certain other variables. Journal of genetic psychology, 93, 291-301.
- Breckenridge, M.E. and Vinecent, E.L. (1965). Child development, 5th ed., Philadelphia: ~~Saunders~~ Saunders.

- Chansky, N.M. (1958). How students see their teachers. Mental Hygiene, N.Y., 42, 118-120.
- Cheong, G.S.C. and Devault, M.V. (1968). Pupils' perceptions of teachers. Journal of educational research, 59, 446-449.
- Christensen, C.M. (1968). Relationships between pupil achievement, pupil-self-need, teacher warmth and teacher permissiveness. Journal of educational psychology, 51, 169-174.
- Clarke, H. and Olson, A.L. (1965). Characteristics of 15-year old boys who demonstrate various accomplishments or difficulties. Child Development, 36, 559-567.
- Cohen, E.G. (1965). Parental factors in educational mobility. Sociology of Education, 38, 404-425.
- Coleman, J.S. (1961). Athletics in high school. Annals of American Academy political social sciences, 338, 33-42.
- Coleman, J.S. (1962). Teen-agers and their crowd. PTA Magazine, 56, No.7, 4-7.
- Cooper, J.B. and Lewis, J.H. (1962). Parent evaluation as related to social ideology and academic achievement. Journal of genetic psychology, 101, 135-142.

- Cottle, T.J. (1968). Family perceptions, sex role identity and prediction of school performance. Educational psychological Measurement, 28, 861-896.
- Estvan, F.J. and Estvan, E.W. (1959). The child's world: His social perception. New York: Putnam.
- Harris, D.B. (1950). How children learn interests. 49th Year-Book, Nat. Soc. Stud. Educ., part 1, 129-135.
- Havighurst, R.J. (1953). Human development and education, N.Y.: Longmans.
- Heil, L.M. and Washburne, C. (1961). Characteristics of teachers related to children's progress. Journal of teacher education, 12, 401-406.
- Hill, J.P. (1967). Similarity and accordance between parents and sons in attitude toward mathematics. Child Development, 38, 777-791.
- Hurlock, E.B. (1983). Personality development, TMH Ed., 1st reprint, New Delhi: Tata McGraw-Hill Co.
- Jarrett, W.H. and Haller, A.O. (1964). Situational and personal antecedents of incipient alienation: An exploratory study. Genetic Psychology Monograph, 69, 151-191.

- Johnson, O.G. (1957). The teacher's role in providing a climate to grow in. Journal national Educational Association, 46, 233-238.
- Joseph, T.P. (1969). Adolescents: From the views of members of an informal adolescent group. Genetic Psychology Monograph, 79, 3-88.
- Joshi, M.C. and Singhvi, U. (1985). Characteristics of teacher, taught and teaching, from primary to college levels, in relation to their psychological factors: A developmental study of perception of characteristics through S.D. technique. Doctoral thesis (of the second author under the supervision of the first author), University of Jodhpur, Jodhpur (India).
- Kandel, D.B. and Lesse, G.S. (1969). Parental and peer influences on educational plans of adolescents. American sociological Review, 34, 212-223.
- Levin, H., Hilton, T.L. and Leiderman, G.F. (1957). Studies of teacher behaviour. Journal of experimental Education, 26, 81-91.
- Livson, N. (1966). Parental behaviour and children's involvement with their parents. Journal of genetic psychology, 109, 173-194.

- Macfarlane, J., Allen, L. and Honzik, M.P. (1954). A developmental study of the behaviour problems of normal children between twenty-one months and fourteen years.
Berkeley: University of Calif. Press.
- Medley, D.M. (1961). Teacher personality and teacher-pupil report. Journal of teacher Education, 12, 152-156.
- Mitchell, S. and Shepherd, M. (1967). The child who dislikes going to school. British Journal of Educational Psychology, 37, 32-40.
- Mussen, P.H., Conger, J.J. and Kagan, J. (1969). Child development and personality, 3rd ed. N.Y.: Harper & Row.
- Packard, V. (1961). The status seekers. N.Y. : Pocket Books.
- Poffenberger, T. and Norton, D. (1959). Factors in the formulation of attitude toward mathematics. Journal of educational Research, 52, 171-176.
- Rubinstein, B.O., Falick, M.L. and Levitt, M. (1959). Learning importance: A suggested diagnostic category. American Journal of Orthopsychiatry, 29, 315-323.

- Schwartz, J. (1960). The portrayal of education in motion pictures: 1950-1958. Journal of educational Sociology, 34, 82-90.
- Sears, R.S., Maccoby, T.E., Levin, H. (1957). Patterns in child rearing. N.Y. : Harper & Row.
- Simon, M.D. (1959). Body configuration and school readiness. Child Development, 30, 493-512.
- Solomon, J. (1960). Neuroses of school teachers. Mental Hygiene, N.Y., 44, 79-90.
- Spence, L.J. and Church, J. (1968). 'Childhood and adolescence, 2nd ed. N.Y. : Random House.
- Symonds, P.M. (1960). What education has to learn from psychology, IX, Origin of personality. Teachers College Rec. 61, 301-317.
- Warliner, C.C., Foster, D.A. and Trites, D.K. (1968). Failure to complete as a family characteristic: A college sample. Journal of educational Research 59, 466-468.
- Weigand, G. (1957). Adaptiveness and the role of parents in academic success. Personnel Guidance Journal, 35, 518-522.

Williams, R.L., and Cole, S. (1968). Self-concept and school adjustment. Personnel Guidance Journal, 46, 478-481.

Witty, P.A. (1961). A study of pupil's interests: grade 9, 10, 11 & 12. Education, 82, 160-174.

Yando, R.M., and Kagan, J. (1968). The effect of teacher tempo on the child. Child Development, 39, 27-34.

TITLE OF PAPER: ENCOURAGING CREATIVITY AMONGST CHILDREN

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1. To-day's World is contracting in space due to population explosion and high degree of industrialisation. This has given rise to many complex problems and the living on tomorrow's world would be more and more complex. The Scientists, Engineers, Industrialists, Architects, Sociologists, Politicians, Educators and the people at large would have to find and search new and novel solutions, to various problems for improving the quality of life, besides, survival and existence. We would have to be more creative than what we have been. Hence it is imperative that people collectively and individually formulate methodology to encourage children of today who are the citizens of tomorrow, for the development of latent creative talent. Creative citizens will not only solve problems creatively, but also prevent problems.

2. Creativity is a fusion of perspective in a new way, (Mc Keller), the capacity to find new connections (Kubic), the new and novel relationships (Rogers), occurrence of

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composition which is new (Murry), the disposition to make recognition and innovations (Lasswell), an action of mind that produces new ideas (Gerard), the moulding of experience into new organisations (Taylor), the presentation of new constellations of meanings (Ghiselin).

3. Carl Gregory has defined Creativity as "The production of an idea, concept, creation or discovery that is new and useful or satisfying to the creator or some one else in some period of time."

4. Creativity combines in unique and diverse ways previously existing unknown phenomenon of nature. The continuous manipulation, and juxta-position of ideas and concepts through mental gymnastics evolve new thoughts into future, converging into thoughts, unthought of, killing the obsolete. According to Shaw, "Science is always wrong, it never solves a problem, without creating ten more.

5. Of all the powers of a man creativity is the most unique and hence we have to find creative methods and process for development of creativity amongst children. To create, the mind must be withdrawn, open itself for a time, then focus it's forces and project individualised image of itself to an external medium.

6. Research indicates that creativity and intelligence quotients are co-related, below about 120 IQ. It is also seen that boys who are more close to their mothers and the girls who are more close to their fathers during the period from 4 to 7 years will become more creative than others and this theory explains why there appears to be more creative men than women in the world. The child at this time is enchanted by warm effect of the opposite sexed parent and responds by creative manipulation of his immediate environment. This view of creativity has more consequences for parents.

7. Research has also shown that creativity potential is highest amongst children upto 7 years, and it tapers off from the age of 10 years and is at minimum at High School age. This is so because of the present educational system, schooling, teachers and society at large, wherein, the child has to read, write learn and re-produce to be accepted as a high achiever, in a competitive job oriented world. Thus the merit of a child is judged by his marks, capability to re-produce from memory, give stereotyped answers and find solutions to problems applying the accepted formulae and norms, providing no scope for the child to even express, much less be judged by his capacity to think and be creative.

8. For the development of children, the following factors are responsible to inject, infuse and stimulate creativity.

- (a) Parents
- (b) Teachers
- (c) Educational System
- (d) Social environment

PARENTS AND CREATIVITY

9. Most people think that creativity follows the law of genetics but in my opinion it is not, and the Statistics also reveal it. It is not necessary that children of talented, creative persons would be like their parents, and vice-versa. Creativity is neither hereditary nor the monopoly of a few. However studies on creativity in various countries reveal that children of upper and middle class have shown ~~greater~~ talents as they have more freedom and are not governed by strict rules and regulations of society.

The parents can initiate the child in creative recreations and occupations like reading, sports etc., which are exciting, thrilling and adventurous.

Some of the ways to stimulate and encourage creativity amongst children, by the parents are discussed below:-

Flights of Imagination

10. Materials which develop the imagination of the child should be provided to children by parents to kindle the flame of creativity. Parents should encourage the natural inclination of the child. The imagination develops the ability to think.

Enriching the Imagery

11. Fairy tales, mythological stories, folk stories of which we have rich literature, should be given and children should be encouraged to a part of supplementary reading in school curriculum.

Day Dreaming and Creativity

12. Children should be given enough time so that they can do daydreaming for their development. Most parents keep children so busy that they find no time for their own thought pursuits. Normal tendency amongst parents is to keep the children busy, either doing home work or household work which does not give them any time to originate, germinate and incubate creative thought process.

Conceptional Opportunism

13. The children should be given chance to look for the unexpected. A creative child can be compared to a wayward bride-groom who during his wedding ceremony evaluates the potentialities of bridesmaids.

Idea and Media

14. Children should be able to express their ideas orally or in a written form and asked to keep a record. They should do a great deal of writing, talking and thinking aloud. This will bring clarity and clinical filtration of divergent thinking, and converge into creative ideations.

Acceptance of Lateral Thinking

15. Lateral thinking is looking at something differently, of moving from familiar to unfamiliar, from known to unknown. Parents should accept the children's new concepts, analogy, synetics and bionics. Fortunes are made that way. At times they be made to do lateral thinking by prompting.

Reward Individuality

16. Children do crazy things. Their craze should not be curbed. It should be encouraged by show off to friends and relatives, so that child feels proud of his ideas and ideations.

Love them and their creativity

17. Children respond much more, when they feel they are loved, liked and adored. Love is a creative relationship between the child and it fosters creativity.

Teacher taught and Creativity

18. The teacher is much more responsible for nurturing creative thinking. It is the teacher who identifies the creativity of the child. The creative child in a classroom would give tough time to the teacher by giving arguments, behaviours, communications, verbal and non-verbal and conflicting ideas leading to new ideas. The teacher must not only encourage such behaviour but also exploit the talent of the creative child by being a catalyst.

Trouble Maker to Trouble Shooters

19. The trouble making by creative children may be disturbing in classroom. The teacher should transfer, this in a positive, constructive ways so that their potentialities can take an outstanding direction.

Let them work in their own way

20. Creative children march to a different drum beat are not conducive to work in a group. The teacher should be open and feasible, and give a challenge so that they can demonstrate their creative skills.

Creativity and Class Room Activity

21. A mutual self discipline for each other between the teacher and the taught must prevail and they should welcome each other's issues and responses.

Question and Response by Children

22. Questions and response technique as suggested by Louis Robin helps the children to think creatively. Some of these can be usefully employed by teachers as given below:-

- a) During discussion, one person talks at a time and interruptions are out of order.
- b) Probe beyond the answer to Yes/No questions, why, how, when, where etc.
- c) Consider your questions; is it specific? Is the responsibility of the learner clearly evident? Does the learner know what is expected of him?
- d) The questions should be asked clearly leading to development of the purposes teacher had in mind while using the questions? E.g., to stimulate thinking, search for relationships, design experiments, make observations, etc.
- e) If the teacher feels there is a value in children learning to pose questions, then teacher must respond to children's questions, in some positive encouraging way.

- f) Ask the questions, then wait. If the children are to learn that the responsibility for thinking is theirs, teachers must give them time to think and respond.
- g) Different kinds of questions should be posed to stimulate different kinds of purposes or objectives.
- h) Questions should be structured in a way that there is no one "Correct" answer.
- j) Give children the chance to find out for themselves that their ideas may be of little value.
- k) Provide the time and opportunity for more than one child to respond.
- l) React to the children's responses in a variety of ways in order to present any subverbal cues.

Teacher as the catalyst of creativity

Here are some of the tips for teachers to stimulate creativity during teaching session:

- (a) Don't be too threatened by the exceptional child or the unexpected response. It should be a laboratory for democracy.
- (b) Don't be too concerned about a higher noise level
 - It is a "a busy hum", full of activity.
 - Activity promotes creativity.

- (c) Don't be blinded by "intelligence" test scores .
they don't tell the whole story.
- (d) Forget and forgive the "mistakes".
- (e) Don't let your pride get in the way of your
teaching, different kinds of children learn in
different ways. Individual differences amongst
children must be recognised.
- (f) Never set time limits, standards or sets, give
them enough time of their own.
- (g) Let them "test" their limits".
- (h) Don't let the pressure for "evaluation" get the
upper hand.
- (j) Give them a chance to "warm up" to produce ideas.
- (k) Give them home work, the answers of which require
original thinking.

Computers and Creativity

22. Talking about computer and creativity may sound like combining beauty and the beast. But the capacity of a computer is immense, to stimulate, substitute, combine, and process vast variables. An intelligent manipulation of the computer games, and problem solving will definitely provide chance to find all possibilities and select the best one. The children should be given chance to play with their ideas and have unique personal experiences. Computer is best suited for this 'activity for promotion of creativity.'

Keepers of Flame

23. In the schools all over the Country teachers teach from the text book and seldom revise their lessons. They keep the fires of mediocrity burning and maintain the rituals in the academic areas. They are the specialists who maintain status quo. Thus the teaching of a child suffers from freshness, newness and uniqueness. The teachers should create new interests, new innovations to kindle the flame of creativity.

EDUCATIONAL STRUCTURING FOR CREATIVITY

24. When we critically examine the educational spectrum for the child, we no doubt produce the specialists, masters of the subject, but not creative thinkers. Children are discouraged because of our educational system, which gives more emphasis on Read, Rote and Re-produce. The success is measured by retativity of facts and their re-production in the examination on answer sheets.

25. The aim of education should be to identify creative potential, then evoke and provoke the creative and innovative thinking. In this regard the objective tests in most schools lay emphasis on conformity and uniformity rather on creativity, or divergent thinking. The questions should be subjective rather objective for creativity.

Identifying the Creative Potential

26. The creative potential of the child should be identified by various tests based on aptitude and attitudes. The creative attitude of child is tested by exploring openness and awareness of environment, Carl Rogers has expressed, "I find creative expression to be sensitively open to all of it's experience, sensitive perhaps to men of all the feeling, reactions and emergent meanings which he discovers in himself."

27. The creative individuals are more flexible and fluent. Their perception and cognizance are unique in approach to the problems, their intuitive power and perception are open. Creative children are more recreative, able to secure and realistic to perceive both objectively and subjectively.

28. One of the conditions that affects creativity is the individual's feeling about himself. Each of us has a feature which governs our out-look. When one has confidence and pride in self, he feels free to express himself. When this image is the source of shame, the tendency is to hide and to be lost. The Psychologists consider that adequate and mature personality is a creative personality.

29. Paul Torrance has described many behaviours of the children, as highly desirable for creative talent. Some of them can be used to formulate tests for identifying creativity amongst children in India. Infact we should devise our own tests under indian environment keeping in view the economic climate.

Curriculum For Creativity

30. The curriculum upto high school should hinge upon the selection of study of subjects for self directed enquiry. The child should be given enough chance for inquiry, experimentation with unknown, investigate thoughts that come as brain waves.

31. We should introduce the unknown into the syllabus which offers a student a feeling for creation of knowledge. When the answer to a question is unknown to teacher, text book or mankind, creativity is developed.

Transfer of Learning

32. We should provide the children with basis for transferring his learning. The child should be able to transfer his knowledge from one technology to the other.

Response

33. The curriculum should provide for expanding the responses in several ways to a simple phenomenon.

Effective Thinking

34. The syllabus should improve the ability to think about problem solving, through creative thinking to find a variety of solutions rather than only one.

Cognitive Alternatives

35. Education should provide alternatives which are otherwise ignored.

Variety of Responses

36. The variety of responses to various problems are more important than quality. The children should be graded on divergent variance rather than on factual response. The fiction yesterday is fact today and fact today may be fictitious tomorrow in a dynamic creative world. What actually happens in the present educational system is, that the child is made to solve problem in a conditioned routine, and he fails to explore possibilities of discovering alternative methods. A child is loaded with so many facts to master and very little to think and give vent to his thoughts.

37. The educators are responsible to nurture creativity, as an accessory gain through educational curriculum. Education should not only produce specialised training experience but also produce the capacity for original thought. The educators will have to creatively evolve, a creative and re-creative curriculum for the child. This is the need for today and tomorrow.

CREATIVITY AND SOCIETY

38. Creative child behaves creatively in a manner which is not in conformity to values, attitudes, of the immediate social circle peer group, parents and teachers. A highly creative child has problems of isolation and adjustment. The highly creative children are often alienated from their peers, parents, teachers and elders in society. Paul Torrance has suggested that creative children have unrealistic career choices and unconventional career aspirations.

39. It is also observed that creative children have indifferent attitudes and behave quite differently at home, school and in social environment.

Some teachers, parents and psychologists have branded the creative behaviour of talented children as undesirable. It is for the society to tolerate and

channelise these valuable abilities into productive, socially desirable attributes.

40. Creativity in children's is a national concern. To encourage creativity and creative learning by fostering and mothering, would encourage his all round development. The society must understand that the highly creative student will have to exist in the shadow of his more successful peers. The society will have to be more tolerant to a creative child who will challenge every thing including God and will trust the perception of his own reality. The values of the society and the creative child would be at conflict and variance and will have to find a creative solution for encouraging creativity.

CONCLUSIONS

Child is the father of man and necessity is mother of invention. In the world of tomorrow we will have both necessity and scarcity of resources, calling upon to find creative and recreative solutions to the problems, not only this, we will have to find ways and means for prevention of problems. A child with average intelligence has creative potential, he only needs suitable environment at home, in school and in society. The educational system should promote his divergent lateral thinking so that his creative potential is optimised.

Each one of us, teachers, parents, educators, psychologists and people at large must evolve creatively an educational system by which a child's creativity is germinated and nurtured, to a useful creative innovation for a better quality of living. Tomorrow is not far, it is here, it is now. We need rational thinking about problems of creative child and methods to encourage him. Let us make fullest use of human brain to use intellectual qualities, the most precious of human resources of our children. After all being creative is searching for truth and living truthfully.

Lastly, creativity is like a spring of fresh water which may be a nuisance when it first issues from ground producing only mud and muck. It can not be stoped by cement. Its flow will continue to sweep around the edges. When the spring is given a channel it becomes a source of joy. That's what creativity is all about and that's what we should do to encourage creativity amongst children.

REFERENCES

- Wallach, M.A. and Kogan, N, Modes of Thinking in Young Children - a study of Creativity-intelligence distinction. New York, Holt Rinehart and Winston, 1965.
- Bonnes, M.G. Creativity, A complimentary relationship between information demand and success at Problem solving. Intelligence, Volume-2, Number 2 April June 1978. Abex Publishing Corporation, Norwood, New Jersey.
- Gregory, C.E. The Management of Intelligence, Mc Graw Hill Book Company, New York 1967.
- Gowan, J.C. and Torrance, E.P. Creativity - it's educational implications, John Wiley and Sons USA, 1967.
- Haeflle, J.W. Creativity and Innovation, Reinhold - Publishing Corporation London, 1962.
- Telford, Charles W. The Exceptional Individual, Prentice Hall Inc, 1967.
- Kundu, D. Creativity and it's relations to some personality variables in High School students, Journal of Psychological Researches, May 1987, Vol-31.
- Mishra, B.C. Creativity in Students of Two types of Schools Indian Journal of Applied Psychology.

Tewari, N. Productivity and the Creativity of the People,
Management Review - 1987.

Tewari, N. Creativity in Battle, Sainik Samachar (Under
Publication).

Torrance E.P. Guiding Creative talent, Englewood Cliffs NJ,
Prentice Hall Inc. 1962.

Mackinnon, DW/ The Nature and Nurture of Creative Talent,
Psychologist XVII (1962) 489-95.

Wilt M.E Creativity in Elementary School, New York
Appleton Century Crofts, 1959.

Stein, M. Creativity and the Individual, The Free Press of
Glencoe, New York 1960.

TITLE OF PAPER : CHILD CENTRED APPROACH IN EDUCATION :
A PSYCHOLOGICAL ANALYSIS

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If one examines the existing academic practices in school, one may find the role of teacher as an instruction giver. Teachers, by and large, are more akin to express subtly ordered and structured information on mathematics, science, literature, social science and other areas of human creation and experience in the medium of language. Indeed, such an act denies learner the opportunity for multisensory experiences. The child-centred approach has emerged as a revolt against such traditional practices as the lecture, question and answer lessons, narrow curriculum and teacher dominance.

THE child-centred approach has been perceived as a move towards creating and providing a variety of activities and experiences and developing and extending projects centred on subject matters that may ensure learner's involvement in the learning process. It also visualises to encourage self-direction, develop various skills and abilities, and create conditions for learning rather than providing instruction.

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It implies that teaching-learning activities should be conceived in terms of structured operations where manipulation of operations is essential parameter for the attainment of knowledge or the development of skills of the learner. The role of learner in such a context is that of an active participant rather than that of a submissive observer. The underlying assumption is that active involvement of the learner in a learning context is likely to facilitate optimal learning. For example, consider an instance where a teacher is concerned with teaching the concept of addition. Teacher prefers to expose the learners to the concept by organising activities. Obviously the teacher has to do the task analysis and determine the sequences. He may present the concept in terms of concrete particulars and provide learners a context for certain specific operations by manipulating the particulars to attain the concept. It is equally true that the teacher can provide a detailed talk on the concept. Learners' attainment of the concept will be more effective when he/she actively participates on the structured activities. The underlying rationale is that one can learn effectively when one does and experience things oneself and is quite distinct from learning or reading an account of them.

RATIONALE for the above perspective can be obtained if one examines the established positions in learning theory. The earliest position suggests deliberate attempt to bring connection between stimulus and response. A deliberate attempt is being made to bring stimulus and response together repeatedly by connecting them to form a stimulus-response bond. Interestingly, experiments conducted by various psychologists suggest active involvement of organism in establishing the stimulus-response bond. In fact, learning is conceived as a matter of establishing such bonds.

THE associationist's position is that the desired responses will tend to occur if the learner is rewarded when they occur and on the other hand, the incorrect responses can be eliminated by punishment. Skinner has done extensive research on the behaviour responses of organism and suggest that the responses are not tied closely to specific stimuli but are rewarded when they occur, so that the response will tend to be repeated. The principle of reinforcement of desired responses underlies the programmed instructional strategy which envisages an orderly presentation of stimuli; active involvement of the learner in the manipulation of stimuli to produce the desired responses and the systematic rewarding of desired responses.

The pedagogical implication of the associationist tradition demands the teacher to select and structure stimuli and responses, and design programmes to ensure the learner's involvement in strengthening the bond between them.

THE cognitive group, however, claims that new experience by linking up various elements by association does not make any sense. The group insists that knowledge is a matter of insight and can not be dissected into elementary sensory or verbal units. Insights define and organize experiences into meaningful wholes. It is maintained that learning is essentially a process of making imaginative leaps to a grasp of total phenomenon rather than building up of sequences of ideas by association. In fact, human learning is a complex phenomenon and it is not logically sound to think that one theory is adequate enough to provide the necessary explanation of the inherent complexities. It means that both the positions need not be considered rival or exclusive pedagogical methods. Rather, an alternative position would be to think of them as both offering ways regarding aspects of learning process. A process sometimes operates best in building up associations of ideas and sometimes building up of insights into the nature of material to be learned. Gagne, for instance, based on research evidences suggests multiple types of

learning which can be arranged hierarchically in terms of their order of complexity. The hierarchical order consists of eight types of learning: signal learning, stimulus-response learning, chaining, verbal association, multiple discrimination, concept learning, rule learning and problem solving. Obviously, the learning is identified in terms of different levels of activities, ranging from simple responses of the associative type at the lowest levels of comprehension to more complicated problem solving at the highest level. The hierarchy suggests a gradual increase in the thinking process involved in learning. This framework indicates a meaningful set of categories by which learning tasks can be structured, ordered and sorted. The framework is also suggestive of the primacy of the manipulability in a learning situation.

Manipulability, perhaps, the most central aspect of child centred approach implies creation of a manipulable context for learning. It has two major components. The first component indicates that if an idea is transferred into actions, it may provide the learner a context for direct multiple sensory experiences. For instance, whether one is teaching the concept of number or volume, one should begin with concrete action to be performed, leading to building up of vivid images and arriving finally to the formal descriptions in natural language. The second

component which is closely linked to the first suggests that actions should be structured according to the learner's level and performance of specified actions ought to develop new cognitive structure. If the structured actions, on the other hand, do not provide the scope to develop new cognitive structure; obviously such actions are meaningless in creating objective conditions for learning. The basic premise is that if a complex idea is rendered in the operational form, it may demand the learner to manipulate the specific operations and ensure involvement of various sense organs which may aid the learner to attain the mastery of the idea and build new cognitive structures.

Another aspect of child centred approach is the developmental perspective of the child as a learner. This view points out that development of children is normally a progression, through fairly well defined and predictable stages. The progression may be slowed or halted and it is possible for individuals to be at different stages in respect of different aspects of their experiences. The implication is that child's development involves attainment of a series of prerequisites and what a child learns will be determined to a large extent by the type of thinking he is capable of. The major function of pedagogy, in this context, is to develop and provide conditions that

would allow a learner to progress through various prerequisite series; and to develop thinking and the related dimensions of development. This naturally, demands a match between learner's trends of development and the pedagogical approach.

Of equal importance for the child centred approach is the view that learner must be recognised as an individual. Learner as an individual has needs, temperaments, attitudes, values and interests besides ability. In other words, each learner has a personality comprising of unique pattern of traits. It implies that there exists differences in terms of the components of personality among learners and the main concern of education should be to develop instructional programmes and approaches to meet such differences. In fact, each instructional programme should be structured in a manner that should enable the learner to attain independence in thought and action at the end of each sequence of learning. Though it is a complex phenomenon, once certain competency is achieved, interest in further exploration and development if achievement competency must be kept alive.

It is true that the locus of the approach is on the child as a learner where teaching-learning programmes are designed keeping the emphasis on the learner. Such a

claim does not reduce the role of teacher at any level; rather the teacher's role becomes more challenging and assumes the role of facilitator of learning and becomes the source for learning resources. Invariably, knowledge and skills are hierarchically structured and in such a context learning a principle or skill is a hierarchical process in which lower-order elements are gradually integrated to form higher order ones. Achievement in each type of learning depends on acquiring the preceeding one. As a consequence, the teacher needs to consider the relevance of subordinate types of learning when preparing instruction. Obviously, this requires task analysis, ideally, the teacher should map out the hierarchical structure underlying the educational objective to be attained and structure the instruction. The student is then led from the entering position in the hierarchy to the terminal through intermediate steps. This provides an objective condition for the teacher for optimal sequencing of different levels of learning and development of instructional programmes which will most likely to facilitate optimal learning.

TITLE OF PAPER: EDUCATION AND DEVELOPMENT OF GIRLS IN
THE CONTEXT OF CHILD CENTRED EDUCATION

Chandrakala Dhar*

Individual development rather than development of girls or development of boys is accepted as the proper concern of education. Somehow, along the way to this goal, the development and education of girls has lagged behind and therefore the need has arisen for corrective and accelerated action and intervention.

Preliminary to intensive programmes of intervention for improving the education and development of girls, and through these the status of women, the educators will have to recognise that abilities and aptitudes are not demarcated on the criteria of sex and that there is no clear cut evidence that boys and girls possess different levels or degrees of aptitudes and abilities. Awareness and acceptance of parity or even lack of differences between boys and girls is non-existent among large sections of society. Collecting, compiling and presenting such information is one significant component of contemplated action. Educators, psychologists, counsellors and media personnel can individually and collectively work to tackle this problem. More crucial than awareness of parity between boys and girls on ability, aptitude and achievement dimension is a change in the attitudes

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which have become deeprooted and widespread due to biased views on these matters.

Girl centred education finds its intrinsic justification in the ultimate goal of securing optimal development of each human being. The self-actualizing individual of Maslow can be man or woman. Beginning with the basic needs relating to physical well being and safety Maslow underscored their importance in healthy human development. Needs for belongingness and love appear next in his hierarchy of needs. These needs include both the needs to give and receive love; these have direct relevance for assuring the individual a place in the society. Fourth level in Maslow's hierarchy is that of self-esteem, the need for a stable, firmly based and high evaluation of one self (self respect); a corresponding need for the esteem of others is also recognised by Maslow. If all these needs upto fourth level are satisfied then self-actualisation needs can manifest themselves in the individual's behaviour.

Rejection and inferiority attached to being a girl are immense handicaps in the way of the satisfaction of the needs for belongingness as well as the need for self-esteem, further, if these needs at third and fourth level are not satisfied then higher level needs of self-actualization do not have the chance of manifesting themselves in girls. Even in case of those individuals who have fulfilled the needs at third and fourth level, Maslow admits, self-actualizing needs may not be met very easily. Concern with the status and achievement of girls and women should be viewed in the perspective of an individual who

is striving towards the goal of self-actualization. Deficiencies and shortcomings in the educational social system which are hindering the wholesome development of girls and women are thus incapacitating them through the nonfulfilment of lower and middle level needs. Satisfaction of the need for self-esteem, for example, is stated to lead to feelings of self-confidence, worth, strength, capability and adequacy of being useful and necessary in the world. Wholesome development and ideal educational programme must be so devised and conducted as to create feelings of self-confidence, strength, worth, capability and adequacy. Does the existing educational set-up yield such a result for the girl students who are passing o through it? It could be suggested that in large majority of girls the system creates the opposite feelings of weaknoss, worthlessness, incapability and inadequacy-of being uscless and unnecessary. Such negative feelings may arise right from childhood when a girl is denied adequate diet and physical necessities with explicit statement regarding girls and women not requiring those things since they are not doing useful and important work which is being done by boys and men.

Maslow's identification of the traits which characterize the self-actualizing people is a widely known exhaustive list. It includes such traits as accurate perception of reality, acceptance of self and others, spontaneity, problem centering, detachment, autonomy, characteristic interpersonal relationships, democratic character structure, definite moral standards, creativeness and cultural transedence. Healthy human growth may be checked

against such a list of traits. Stereotypes of feminine qualities would perhaps present a stark contrast to Maslow's list of traits; sex role prescription for women generally present a different pattern of traits and thus the dilemma for the educators and counsellors.

Maslow's distinction between deficiency motivated behaviour and growth motivated behaviour provides another criterion to differentiate between experiences which are designed to reestablish equilibrium as against the growth motivated behaviour which takes the person above the norm, placing him, figuratively speaking, on top of the world. Growth motivated behaviour is experienced as an end in itself rather than as means to some extraneous end. Maslow's definition of self-actualization as the pinnacle of development, not necessarily attained by every individual; conceptualises development as a theoretical postulate. Individual development has to be assessed as the degree of progress towards that goal which is in reality attained by very few individuals.

Erikson's theory of psychological development is specially relevant to adolescent stage of development which appear as crises resolutions in a successive series leading to adulthood. Beginning in childhood as conflict between basic trust vs mistrust, autonomy vs shame and doubt and in later stages as initiative vs guilt. Initiative is conceptualized by Erikson as a truly free sense of enterprise yielding independent and vigorous movement like adults. Initiative is governed by a conscience

a self dependence which in turn makes the individual dependable but also develops the potential for guilt. Conscience may be overburdened by adult influence; often as parents.

Industry vs inferiority conflict highlights learning of the tools of society and its technology. If the appropriate experiences and learning are lacking ^{there is} / risk of development of a sense of inadequacy and inferiority. A child, or a girl who is unable to learn or is prevented from learning the skills needed for effective functioning in society is subjected to inferiority feelings. Emphasis on skill learning in education and specially in the education of girls should provide a direct link to Erikson's theory.

Conflict resolution between identity and role-confusion is Erikson's best known stage in the context of adolescent development. Rapid physical growth and changes towards physical maturity combined with awareness of tangible adult tasks ahead promotes search for a new sense of continuity and sameness. Development of ego identity is the consequence when one is learning effective steps towards a tangible future. Erikson conceptualises reworking of hope, will, purpose and competence with a coherent set of values along with feelings of commitment and loyalty. Danger of identity diffusion or role confusion is imminent if the crisis is not resolved through healthy experiences and educational support. That even negative identity is preferable to no identity becomes obvious in cases of opting for antisocial or unsocial life styles such as in case of criminals and drug addicts. This stage of crisis resolution is probably very

significant in the context of the educational-vocational development of adolescent girls in the current social situation. Conflict resolution between intimacy and isolation is another landmark in psychological development while entering adulthood. Having developed individual identity the young adult is now able to risk destroying this by fusing it with another's identity. In case of adolescent girls who have not been able to resolve the identity crisis the resolution of conflict between intimacy and isolation is even harder to deal with.

Crises resolution presented in later adulthood in the form of generativity vs. stagnation and ego integrity vs. despair and disgust. These may not be directly relevant while dealing with adolescent girls education. Outlining of two developmental theories; namely those of Maslow and Erikson highlights the preference for a developmental model of intervention. The goal of developmental approach to intervention is prevention rather than treatment or adjustment. Following Maslow's ideal of self-actualisation the goal of optimization of individual functioning is also possible. The interest is more than mere avoidance of malfunctioning. In educational and vocational development programmes optimization of individual development is desirable as a goal. In the context of the existing situation of the education of girls^{and} the intervention strategies, personnel should be educated and initiated to these goals and tasks.

Teachers, teacher educators, psychologists, counsellors and other professionals in various vocational and technical

fields can all act as the resource pool for the intervention programmes.

However who work in superior administrative, technical and professional fields have the potential to give a strong boost to a variety of intervention programmes.

Work or vocation has to be strongly integrated into any intervention programme because empowerment and status of women cannot be raised without enabling them to integrate their lives with their proper vocation. The social biological role of wife and mother has been exaggerated for too long and has proved to be a very high price to pay.

REFERENCES

1. Cook, Barbara and Beverly Stone (1973): Counselling
Women: Guidance Monograph Series Boston
Houghton Mifflin Co. Boston.
2. Erikson, E.H.(1980): Identity and the Life Cycle:
A Reissue; New York; W.W.Norton.
3. Maslow, A.H.(1968) Toward a Psychology of Being
2nd Edn., New York; Van Nostrand Reinhold
4. Sugarman, Leonie, (1986) Life Span Development,
London Methuen.

TITLE OF PAPER: CHILD-CENTRED EDUCATION
THE PLACE OF REINFORCEMENT

R.K. Sharma *

Education aims at full development of an individual's potentialities. It aims to develop his abilities, skills as well as his attitudes, values and personality. But it is a common observation that we fail to achieve these objectives to the extent that we desire. In spite of our best efforts and educational inputs to the teaching-learning situation, children's development, and educational performance falls short of the level that is expected to their age or grade in the school. In addition to other factors, it may be due to the lack of sufficient motivation on the part of students teachers, parents, and others involved in the teaching-learning process. In such a situation an understanding of the reinforcement principles and their application can be helpful. So first let us have a brief look on the basic principles of reinforcement and then we will see how these can be applied to attain the educational objectives.

Basic Principles of Reinforcement

From the view-point of behavioural approach, education aims at bringing about changes in behaviour and for most

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practical purposes, it is learned. The problem of analyzing and improving behaviour has been studied by adhering to various stand-points. One of the important and recent approaches among these centres around operant learning theory and reinforcement theory. In the third quarter of the twentieth century, behavioural psychologists applied a natural science approach to the study and analysis of human behaviour and learning. One of the goals of this approach has been to determine cause-and-effect relationships between human behaviour and environmental events that initiate, maintain, modify or extinguish the behaviours. With the help of experimental analysis of behaviour it has been established that behaviour is lawful, and in part at least a function of its consequences. In other words, the consequences of a behaviour determine the probability and rate of its occurrence in future.

Much current research on reinforcement principles and their application stems from the research of B.F. Skinner. He developed the principles of operant conditioning and operant reinforcement. He defined operant behaviour as any behaviour whose probability of occurrence is determined by its history of consequences. Operant reinforcement is said to have occurred when a behaviour is followed immediately by the presentation of a stimulus (the reinforcer) and, as a result, this behaviour occurs more often in future. Reinforcement theory is the collection of principles dealing with behaviour and its consequent events.

A behavioural consequence is an environmental change (stimulus) that follows a given behaviour in a relatively immediate temporal sequence and alters the probability of future occurrences of that behaviour. Behavioural consequences are classified as a function of (1) The operation carried out with the stimulus (i.e., it is added to or withdrawn from the environment) and (2) the resultant effect on the future rate of behaviour. Figure I shows the relationship between consequences and their effect on behaviour.

		OPERATION	
		Present Stimulus	Withdraw Stimulus
EFFECT	Increase Behaviour	Positive Reinforcement	Negative Reinforcement
	Decrease Behaviour	Type-I Punishment	Type-II Punishment

Figure I : Identification of behavioural processes as a function of stimulus-change operation and resultant effect on behaviour.

Positive Reinforcement

Positive reinforcement occurs when a behaviour is followed immediately by the presentation of a stimulus and, as a result, occurs more often in future. For example, we learn and maintain the behaviour of turning the ignition key

to the right to start the car because the engine has started in the past whenever the key was turned to the right.

Similarly, a child's independent play is said to be reinforced when it increases as a result of his parents' giving praise and attention when he plays.

Advantages of Positive Reinforcement

The obvious advantage of positive reinforcement is that it can be used to increase the future probability of a wide range of behaviours, to produce new behaviours or to increase the frequency or duration of existing behaviours. In the differential reinforcement procedure, the reinforcer is applied to one member of a response class of behaviours and not to other members. The member of the class of behaviours to which the reinforcer is applied increases, whereas members not reinforced decrease in probability. Positive reinforcement can be delivered verbally, through praise, monetarily, or with points or tokens. Positive reinforcement can also be delivered in the form of activities, privileges, or tangible reinforcers.

Negative Reinforcement

Negative reinforcement occurs when a behaviour is followed immediately by the removal or termination of a stimulus, and as a result, occurs more often in the future. For example we may find some students whose misbehaviour in the class increases as a result of being sent out of the class when they misbehave. In this case they receive negative reinforcement for acting out. The teacher might have applied the sending out of the class as

a punishment. But by acting out, the misbehaving student escapes or avoids the punishing (to him) classroom activity and this treatment acts as negative reinforcement for the student.

Advantages and Disadvantages of Negative Reinforcement

Just like positive reinforcement, negative reinforcement can be used to increase the future probability of behaviour. But because the use of negative reinforcement requires a prior worsening of the environment (i.e., stimulus must be present in order to terminate it) negative reinforcement has two disadvantages. First, it is possible that if negative reinforcement is used too frequently, individuals may avoid the situations in which 'aversive' stimuli are present. Secondly the individual may develop aggressive behaviour towards the source of the aversive stimulus e.g., teachers or parents. These undesirable aspects of negative reinforcement can be minimized if we use negative reinforcement procedures in combination with positive approaches like differential reinforcement of the other or incompatible behaviour.

So it follows that one should use reinforcement cautiously and observe its effect on the behaviour in question. In a programme of behaviour improvement one is required to make a judicious use of reinforcers, observe their effect as well as change them if found necessary.

Potential Reinforcers and their Application

There are two main types of potential reinforcers : primary and secondary.

Primary Reinforcers

Primary reinforcers are unconditioned or unlearned reinforcers because they reinforce behaviour as a result of their biological importance in the survival of the individual. Even without previous contact these stimuli are able to influence the future rate of the behaviours they closely follow. Food, water, sleep and certain skin temperatures are examples of unconditioned or primary reinforcers.

Secondary Reinforcers

In order to improve a child's behaviour or personality, the reinforcers are to be used repeatedly. It usually leads to satiation and subsequent loss of the reinforcing value of the reinforcer itself. To overcome this problem, secondary or conditioned reinforcers are employed. The secondary reinforcers are those stimuli that have been paired with other reinforcers or punishers in the past experience of an individual. Social praise and attention are examples of almost universal conditioned reinforcers. Because social attention and approval are often paired with so many other reinforcers, they exert powerful control over much of human behaviour. In a behaviour modification or improvement programme, the secondary reinforcers should be used because these are less susceptible to the fluctuations of deprivation and satiation levels of the

individual and therefore less likely to lose their reinforcing value over time. Research evidence indicates that the systematic use of secondary reinforcers helps us in modifying and improving a wide range of children's behaviours, and thereby enable us to achieve the educational objectives.

Selecting Potential Reinforcers

The selection and use of appropriate reinforcers is a basic step in any programme of behaviour change. A behaviour change programme is not likely to be successful without identification of suitable reinforcers. The selection of potential reinforcers can be accomplished in a number of ways. For example, one may simply ask the individual, what he prefers, or he may be observed. The activities or events in which an individual engages himself more can also be used as potential reinforcers for him. Reinforcer sampling can also be used. It consists of providing the individual with several samples of reinforcers and noting which ones are preferred. It gives the subject an opportunity to experience an unfamiliar stimulus. If the individual then performs the behaviour to earn the reinforcer, it is presumed that the stimulus is a reinforcer. The only way to determine whether any potential reinforcer will actually serve as a reinforcer is to try it and observe its effect on the behaviour. The selection of reinforcers should also take care of the age, interest level, and activity level of the individual. A high frequency behaviour can also serve as a reinforcer for a low frequency behaviour if access to the

high frequency behaviour is made contingent upon the occurrence of a low frequency behaviour.

It is best to reinforce occurrences of the desired behaviour immediately, often, and with an appropriate reinforcer. Reinforcement should be generalized across settings, behaviours and time. For example, if a student is praised in the experimental room for increased social interactions with peers, he should also be praised in the regular classroom, at recess, and in the home setting for appropriate social interaction behaviours.

Let us now see how reinforcement helps us in improving various facets of children's behaviour.

Reinforcement and Concept Formation

Concepts are classifications of environmental objects, events, or ideas. Concept formation helps an individual to reduce the complexity of the environment, to identify different objects in the world about him and permits the ordering and relating of classes of events.

The role of reinforcement is of crucial importance in the formation of concepts. Both discrimination and generalization are important in bringing the breadth and precision to a pupil's concepts. Reward and nonreward with corrective feedback help to make the precise discriminations that are necessary for the formation of concepts. Learning experiences should provide pupils with opportunities to make fine distinctions. When

mistakes are made they can be corrected and later appropriate distinctions can be rewarded.

Although immediate feedback is important, it has been found that the providing of a longer delay period after reinforcement leads to more efficient learning of a concept than a very short delay or no delay. This effect is more important for learning complex concepts than for learning simple concepts. The delay period following correction allows the pupil time to determine why he was wrong or right and thus permits a degree of self-correction. These results emphasize that mere reinforcement without some opportunity for correction is insufficient. The reasons for the 'correctness' or 'incorrectness' of a pupil's response should be explained. He should understand, i.e., find out for himself why his response was correct or incorrect and then he should be provided with an opportunity to rehearse or practice what he has learned.

The Role of Reinforcement in Improving Creative Behaviour

There is hardly a need to emphasize the importance and social usefulness of creative behaviour and it goes without saying that we should encourage it. Research has shown that creative children often do not achieve as well in the regular classroom setting because of their non-traditional, unconventional behaviour. Non-achievement, and thus nonreward, may lead to the extinction of the creative behaviour of these children. Reinforcement plays an important role in encouraging

creative behaviour also. Research shows that the teachers being powerful reinforcing agents can affect creative behaviour of students by the demands they make, by the expectations they have, and by their reactions.

It is the general practice that teacher discourage the students who ask unusual and odd questions. They are told to be quiet. Such an approach inhibits children's creative behaviour. Even if the teacher can't answer an odd question, he should let the student see that he welcomes such questions and try to help them find the answers. It has been found that encouraging unusual and challenging questions can result in an increase in student's overall creative behaviours.

If we just label some ideas and questions as 'stupid', 'bad' or 'irrelevant', it reduces the chances of students asking better questions. If we try to find something positive in all ideas and help the students to evaluate their own thinking, they are far less likely to inhibit future questioning.

Many studies have shown that rewarding creative activities increases their number also. When teachers tell learners that they expect them to be creative and it is made a part of the overall evaluation, the students tend to show creative behaviour. It has also been found that if extra credit is given for creative behaviour, the students get encouraged and they show higher level of creative performance.

Several studies report that those students who are exposed to a creative model act more creatively than do students who are exposed to models that aren't particularly creative. If teachers are serious about enhancing the creativity of their students, they should exhibit high levels of fluency, flexibility, and originality in their own classroom behaviours. The teachers can also invite their creative colleagues for occasional guest appearances.

Reaching one's full potential for creativity appears to be a matter of living and working in an environment that recognizes and rewards a variety of creative behaviours. It appears that parent-child and teacher-child interactions are far more important than race, sex, or socio-economic status. There are usually large differences in the levels of creativity in any group of students. Some are creative in one area, while others are creative in different areas. In large part this is the result of the extent to which they received reinforcements for their specific creative behaviours in the past. So, it follows that we should use reinforcement to encourage creative behaviour among children.

The Role of Reinforcement in Promoting Positive Social Behaviour

One of the most important strategies for the promotion of positive social behaviour in the growing child is to focus on positive social behaviour and to operate under the assumption that positive and noxious social behaviours are incompatible

with one another. Thus as the former increases as a function of reinforcement techniques, the latter decreases. It has been found that such strategies prove effective. Consider the problem of 'selfishness'. Research has identified some of the critical variables that affect children's learning to help, share, and donate and some of these may be applied to modify a child's behaviour. One of the additional advantages of focussing on the positive is that productive or prosocial behaviour, such as helping, smiling, or complimenting are usually reinforcing to others. Thus, increases in the rates of behaviours may enrich the relationships between children and others in their lives. As with other classes of behaviour, pro-social behaviours have been shown to be modifiable through operant conditioning procedures. Children with social-emotional problems increased their rates of sharing, smiling, positive physical contact, and verbal complimenting when instructed via modelling, instructions and verbal praise.

The Place of Reinforcement in Developing Positive Attitudes and Values

It has been observed that often we do not reinforce the actual behaviour but rather reinforce only the verbal statement about that behaviour. Such an approach is hardly effective. To build attitudes or values, we must reinforce the actual behaviours desired, and not just statements about behaviours. For example in order to produce good eating habits, the teacher should 'reinforce' students for preferring milk to a

soft drink, instead of only saying, "milk is better than soda". For 'good' behaviour as well as 'bad' behaviour, it is better to make consequences or reinforcers follow the behaviour itself rather than a report of the behaviour. Similarly for developing other attitudes and values like honesty, generosity at home, cooperation or conservation, we should determine and define their indicators in explicit behavioural terms and then reinforce these according to the known principles of reinforcement.

The Use of Reinforcement in Developing the Child as an Independent Learner

The ultimate aim of education is to make the child an independent and responsible adult. Reinforcement techniques can help us in achieving this goal also. After the development and maintenance of certain desirable behaviours in the classroom or school situation, we want that these behaviours should become a part of the child's behaviour repertoire in other situations outside the class or school also. Suppose we have trained some children to work hard in the class and then we observe that they work hard in the class because they want more marks but do not seem to like the studies and pursue them on their own. Our objective is to develop them as independent learners.

To motivate in this sense means to bring the students under the control of what they produce themselves. To attain this objective, we are required to make learning itself reinforcing

for the students, so that they learn not just for a grade or to please the teacher, but for the enjoyment they get out of learning, for the natural consequences of solving problems, and discovering new things. This can be achieved by shifting control from ourselves to natural reinforcers or consequences. In other words we can say that control is transferred to the minds of intermittent reinforcement that occurs in daily life. A teacher's job is to produce persistent and independent behaviour by the application of reinforcers and then withdraw gradually. This approach makes the activity itself reinforcing for the student and develops his intrinsic motivation which is one of the most important goals of over-all education of children.

In the end, let us have a look on some of the major shortcomings of current educational practice in terms of reinforcement principles and how we can overcome these,

The Shortcomings of Current Educational Practice

If we analyze the situation from the standpoint of reinforcement principles, we find certain shortcomings in the current educational practice. For example, the bringing of correct responses under stimulus control is faulty and inefficient. Skinner observes, "In education we design and redesign our curricula in a desperate attempt to provide a liberal education while steadfastly refusing to employ the available engineering techniques which would efficiently

build the interest and instill the knowledge which are the goals of education. "Skinner notes the following current weaknesses in educational practices :

1. Behaviour is dominated by aversion (escape) stimulation.
2. There is usually too great a lapse of time between behaviour and its reinforcement.
3. There is a lack of a skillful programme of reinforcement that moves forward through a series of successive approximations to the final complex desired behaviour.
4. The reinforcement of desired behaviour occurs much too infrequently.

Behaviour Dominated by Aversion Stimulation: Children learn primarily to escape the threat of a series of minor distasteful events like teacher's displeasure, criticism by classmates, low marks, or a visit to the Principal's office. In such atmosphere, the learning of right answer becomes rather insignificant. So, we see that the emphasis in teaching and learning is not centered where it should be - in operant conditioning.

Excessive Time Lapse Between Behaviour and Reinforcement:

Usually there is a long time gap between learning and the reinforcement, e.g., a grade on a test taken at the end of the month. Though the generalized reinforcers like approval, grades, degrees etc. reinforce acquisition of the type of behaviour learned in school, they seldom reinforce the subject

matter elements themselves because of this time lapse between behaviour and reinforcement.

Absence of a Programme of Serial Reinforcement: A carefully planned programme of teaching should move step by step reinforcing a long series of progressive approximations to final desired behaviour. Since teachers donot have time to deal with students' responses one at a time, it is usually necessary for them to reinforce the desired behaviour only in blocks of responses.

Infrequency of Reinforcement: Perhaps the most serious of current classroom practices is the relative infrequency of reinforcement. It has been estimated that although the learning of adequate efficient mathematical behaviour at the primary grades requires .25,000 to 50,000 reinforcement contingencies, the teachers of even the best schools are able to provide only a few thousands. Thus the classroom practices require thorough revision in light of the recent advances made in techniques for control of the learning process.

The Relevant Considerations in Teaching a Child:

For planning a procedure to inculcate certain desired behaviours in a child, we need answers to the following questions :

1. What behaviour is to be Established ?: The first job of an efficient teacher is to determine carefully what he plans to teach at a specified time. He should spell out his objective

in specific behavioural terms.

2. What Reinforcers are Available ?: Some activities like playing with mechanical toys, painting or solving puzzles provide automatic reinforcement of the child. In addition to automatic reinforcement that arise from manipulation of the environment, certain other reinforcers are usually available and should also be used. The goodwill and affection of the teacher may also be reinforcing. In addition to these the behaviours exhibited by students more frequently can also be used as reinforcers to strengthen the desired behaviours.

3. What Responses are Available ?: In order to plan a programme of progressive approximations that will lead to the desired final form of behaviour, a teacher must have at hand an inventory of the responses that are available throughout the learning process.

4. How can Reinforcements Be Most Efficiently Scheduled ?: The efficient scheduling of reinforcements depends on two considerations, namely,

- (i) The gradual elaboration of extremely complex patterns of behaviour into small units or stages, and
- (ii) The maintenance of behaviour in strength at each stage.

To quote Skinner, "The whole process of becoming competent in any field must be divided into a very large number of very small steps and reinforcement must be contingent upon the accomplishment of each step----- By making each

successive step as small as possible, the frequency of reinforcement can be raised to a maximum, while the possible aversive consequences of being wrong are reduced to a minimum.

Such a strategy helps in developing and strengthening of the desirable behaviours.

In conclusion we can say that a careful and proper use of reinforcement helps us in effective handling of overall education of the child.

TITLE OF PAPER: GEARING UP EDUCATION FOR STRUCTURED
AFFECTIVE DEVELOPMENT

Daya Pant *

The child centred approach in education reflects the concerns the educationists have for the optimal development of the child. This approach is the product of the insights developed in the educational process over the years. The insights prompted educationists to realise that education process should be made a pleasant experience for children which they may seek out, instead of one that is an ordeal which they are forced to go through.

Basic foundation of the choice of educational process lies in the belief about the learning process-how learning takes place. Early philosophers conceived of learning process as one where teacher is the pivot on which educational process is balanced. He is conceived of as model or ideal whereas the child is the one who follows or imitates the knowledge which is passed on to him as a legacy or heritage. This view point of perennialists undergoes a like change, with respect to the goals of education, with essentialists. They believe in communicating the essential elements of the culture

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to the pupils so as to preserve the cultural heritage. Here also the pupil remains the passive and dependent receiver for whom decisions are made and he is lead rather than finding his own way.

Progressive educationist lead by Dewey viewed education as a process of developing thinking capacities of the child so that he decides for himself. He believed in helping children to explore on their own, learn by their experience and encounter with problems thereby learning to solve problems.

The child becomes the central focus of the educational programme. This thinking is clearly influenced by the advances in the field of psychology and learning. Dewey says the question is not "Whether the school shall or shall not influence the course of future social life but in what direction they shall do so and how". His concern is for the needs of the child and desire to reform both school and society. Then came the existentialist philosophers who tilted the balance completely in favour of the learner and made him the ultimate and responsible choice maker. He is free to guide his destiny, discover his own self, independently, not through the ethos and heritage forced on him even before he is ready to receive it. As a result he never understands his own self more than he did at the time the knowledge which he was not ready to receive was thrust upon him.

Thus the evolution of educational thinking has seen the emphasis shifting from teacher to the taught; from teacher as a model to teacher as a leader; teacher as a disciplinarian to teacher as counsellor and guide. Modern educationists who do not believe in confining themselves to any single philosophy, consider child as the director of the educational process and as one who will decide the pace of his own learning. Thus there is a consensus among educationists now, as never existed before, that child is the main focus of the education, and this feeling is reflected in our education policy (1986) with emphasis on child centred education.

Dewey who was the most well known spokesman of the progressive education has advocated the concept of the child centred education and while emphasizing the various tenets of the progressive view point he refers to

- a curriculum that is life centred and has meaning and significance to the learners;
- Concern for the total not only the intellectual development of the individual;
- and, an environment that allows and encourages social interaction that leads to democratic group living.

Thus Dewey's thinking is set apart from other philosophers in the sense that it focuses attention on the individual in his own right and as a part of the wider society, and also recognises the role education has today in preparing children for living in society, a cooperative living i.e. democracy.

The other philosophers of education take a narrow outlook in the sense that either they talk about sharpening of intellect i.e. cognitive development or about preserving the cultural heritages of society but Dewey's and other progressive viewers are focusing on child, making him the centre of the educational system, and at the same time, they have the vision of the child as a part of the whole i.e. society.

There is a mention of the development of the total individual, and not only the intellect. Totality of the individual also includes his Psycho-motor and affective learning. The education should take care of the affective learning also so that child blossoms into a fully functioning individual. Affective development has always remained in the background. Affective objectives are implied in the curriculum but never stated out clearly like cognitive objectives. It is left to the individual teacher, or institution whether it takes any steps to intervene the pupil's affective development. If the individual child has to become a responsible and efficient choice maker as an adult, his environment has got to be structured with respect to this important developmental aspect. Without providing opportunities for affective development one can't expect that the product of the educational process are likely to be humane how-so-ever efficient and active may be the cognitive development.

Development of the child as a whole will necessitate considering totality of the experiences of the child and stating objectives for not merely the cognitive domain but also for the affective domain. The feeling or the emotional part of the child is the most neglected part of our educational process (Kicklighter,, 1975). Although affect develops on its own spontaneously but left to itself without proper emphasis and support system it is likely to degenerate. Unlike cognitive development for which attention, rewards and praise are instituted, affective development is left to develop by itself. Thereby leaving an imbalance in the planning of education which tilts heavily towards the academic development (Rao, 1988).

The value erosion in society is condemned but value incultation is not given any attention. The problems of peace and war, nationalism, secularism and social responsibility are problems belonging to the realm of emotional or affective development. Therefore, these needs are to be tackled at the school level by including in the curriculum experiences that help develop these feelings and values (2) adopting teaching methods, and (3) having organisational set up that will be conducive to the affective development of the child.

Affective learning is of utmost importance because of two reasons (1) the human beings basically develop from emotional to cognitive (2) The cognitive learning is inextricably intertwined with the affective learnings. Motivation, aspiration, interests and values play a very significant role in determining the achievements of the school children. The affective learning also influences the social development and maturity of the individual. The child learns to co-operate with others so that the time spent in school is enjoyable (Raven, 1987).

The cognitive development, acquisition of knowledge and skill development can take place by putting the utility of these cognitive learnings in proper social and emotional perspective. The effective learning outcomes have to be given a suitable place in the educational process to help children learn in emotionally satisfying ways. This is exactly what educationists like Froebel mean when they wrote that "If they would ever rise to joy and vigour of a knowledge of the inner nature and essence of things, to a living knowledge of things, a knowledge which like a strong vigorous tree, like a family or generation full of life and consciousness of life is spontaneously developed from within....".

The responsibility of education to give experiences to the child in the school setting that will help him develop into a "Becoming individual" having 1) positive mental health and good adjustments and coping mechanism; those who can develop warm friendly relations, (2) A sense of extension of self: (a) to have a vision of the reality greater than self. They have to be helped to relate themselves to society so as to learn cooperative living; to understand the concept of freedom in the sense of tolerance of others freedom; to live with respect for differences in race, caste, creed, and religion etc. (b) to become a member of not only the society and community in which they live but also the one at a distance through radio, T.V. and other means of communication.

Affective learning encompasses a broad spectrum of behaviour such as making adjustments, value patterns, attitudes and interests. These can be broadly classified as development of social and psychological skills and competencies. How the educational process ensures that these skills and competencies could be inculcated in the child? In order to answer this question we need to look at the process of affective development. The process of affective development has been analysed by Krathwohl (1964) and the affective learning continuum has been conceived.

as a process of "internalisation". Internalisation has been defined as the process by which an individual incorporates into oneself the values and attitudes of others as his own. The process of internalization describes the way affective learning takes place.

The various levels of affective development that have been conceived by the author are:

1. Receiving
2. Responding
3. Valuing
4. Organisation
5. Characterization by a value or value complex.

The first level receiving involves the individual's attention being focused on the phenomenon or the stimulus. This level has three substages: 1. awareness of stimuli i.e. simply becoming aware of the stimulus; 2. Willingness to attend i.e. the person is willing to give his attention; 3. the person selects the particular stimulus to observe. At the second level of responding, the individual is again passing through three substages: 1. acquiescence in responding, when the individual is simply complying; 2. Willingness in responding when the individual is willing to respond to the stimulus; and 3. when the person feels satisfied for having responded to the stimulus.

Then comes the next level of valuing when the individual comes to accept the affective stimulus and attaches values to it. The process of valuing has three substages: 1. The acceptance of a value; 2. Preference for it; 3. Commitment to it. Next step is the organisation of a number of values into a system. This includes two steps: 1. conception of all learned values into a system of interrelationships and organizing them in hierarchical system; 2. The characterization by a value or value complex. This is the process of generalisation of the value system so that these values form a pervasive base of the behaviour of the individual. The behaviour is influenced by the totality of the organised value systems and becomes a habit with the person. Next step the ultimate in affective development is the development of a philosophy of life.

Thus, these are the objectives of internalization of values by the individuals as they progress through life proposed by Krathwohl (1967). The purpose is not to describe here the process of affective development but to see how affective development of the children could be enhanced positively. The education system should be so structured that there is a reward system that release the potential of the individual to grow further, and helps unfold

the next higher step in the process of formulation of values. Although the whole course of affective development is not completed in the school premises, however, a solid foundation could be laid down to initiate the process of "Becoming".

Next question that comes up is what structuring is required in the school setting that will help accelerate the affective development of the pupils. The answer lies in the structural constructs of the school. The education system has three basic structural components namely: Teacher, Curriculum and the school organisational set up.

TEACHER :

Teacher forms the human contact available to children in the school. Carew and Lightfoot (1979) suggest, the interaction between teacher and child is multifaceted and embedded in complex webs of different perceptions and values. The curricular content howsoever enriched will fail to achieve the goal of enhancing self and relating himself herself to others if the teacher's attitude is not conducive..The attitude of the teacher assumes a critical importance. What a teacher expects from children is of great importance; how he treats them, what learning goals

he has set out for them; the methodology adopted and his own role therein. Ashenden et al. (1984) very eloquently describe the role of teacher. (Ashenden et al., 1984., p.15), "In so far as values are concerned, school personnel should subscribe to liberal democratic values of a progressive kind that are linked to education choices which are "good, conscious and open". "Teachers will be the most active in the process of ^{translating} general principles into local situations...regardless of the existing practices and relationships at classroom, school and system levels, teacher should hold important content and values."

Attitudinal change

The teacher and school have to adopt the position that affective learning is important as well, they have to appreciate the individual differences and respect them. They have to help the child develop the competency necessary for living and working with others in a co-operative manner. Pick and Walker (1976) have rightly described the situation as follows: Teachers are not encouraged to take seriously their actual classroom work as opposed to their organisational and disciplinary responsibility. The teacher has to change his traditional role as an agent that transmits knowledge and helps intellectual growth. He should be able to perceive himself as a guide

and counsellor whose role includes helping the child:

1. form healthy adjustments to the school, family etc.
2. develop positive self concept,
3. build trust in self and others by enhancing his success experiences.
4. have reasonably high and attainable expectations;
5. stopping unproductive and repetitive behaviour.

Problem of overloading

It may seem very optimistic that teacher will be required to take upon himself or herself so much of responsibility.

The teacher can attain all these objectives in the course of his normal teaching itself. For instance, the English teacher as a part of exercise in writing may ask pupils to write a few lines on Me, Myself, What is my ambition, and What I like/dislike about myself etc. to create awareness about self, future career etc. Teachers of other subjects may ask pupils to collect information about what careers one may enter after this course of study etc. or may talk about educational courses open to them or the importance of the subject in life etc.

The teacher needs to interpret the importance of the subjects to the pupils in a realistic manner. The problems of the teacher such as, concern with many failure in his class; lack of attention and motivation, will take care of themselves; if he is doing these activities with pupils. The time and energy spent in drilling a lot of knowledge fruitlessly on unwilling

minds of pupils needs to be reorganized. The teacher has to first create a readiness among children for learning; the receptivity, which will motivate them to seek knowledge and information. This urge to seek knowledge is the product of affective development which will take place if the pupil are exposed to the relevant experiences. The information concerning the subject, its importance and place in real life has to be learned by the child before he is willing to accept it.

Bruner (1966) has repeatedly stressed that perception of the child's system of representation of frame of knowledge are fundamental to the task of teacher if they want the information to be used.

Flexibility of approach

The teacher has to show a reasonable amount of flexibility and tolerance in his attitude towards the slow; the hyperactive one's and towards the under achievers. Instead of teaching in the usual lecture method - the utility of which is not unknown to any one of us - he may substitute variety by using innovative teaching methods, wherever possible. Although he alone is not responsible for the drab and dull atmosphere of the classroom; the whole of educational process needs overhauling. Refresher courses that pointedly concentrate on these innovative techniques need to be organized and again these refresher courses themselves should not be replication of the usual classroom situation, but ought to be demonstration of the innovative methods followed

followed by training and practice.

Success experience

The teacher has to understand the power of reinforcement. He being the human contact has to communicate the necessary positive emotional undertone that is so essential for success. The success experience is very important and essential for each individual pupil. The teacher as the authority is instrumental in giving or withholding the success experience. A lot of research has shown the potency of the praise and success experience, if it is applied properly. Successive failure at tasks has been shown to produce inactivity, cognitive dysfunction, and depression (Seligman 1975; Abramson et al., 1978; Peterson and Seligman, 1983). Therefore the teacher has to be very careful in giving negative evaluations or failure feedback to the child.

Understanding of self and others

Teacher's understanding of his own self and others i.e. pupils, plays an important role in the teaching learning process. He has to be helped to know himself through exposure to personal effectiveness programmes organized for them. Later they may carry out similar exercises for pupils under the guidance of special programmed curriculum. One such type of activity has been reportedly tried out for pupils by Randolph (1966) in a process called 'Self Enhancing Education'. The essence of programme lies in teaching "process" to the

children and not the content matter of the subject. The children are taught to learn to live and work more effectively resulting in enhanced self esteem which helps them later to improve school achievement. Roen (1967) organized another programme called "behavioural teaching programme".

Curriculum

The curriculum over the years has seen a consistent trend to bring the information and knowledge content up to date but the affective content has been deleted. A very heartening move embodied in the National Educational Policy (1986) is that of reorganization of the curricula so that cultural heritage is preserved and inculcation of the valued such as democracy, secularism is ensured. Efforts are already underway in other countries with the government and state education departments taking up steps to develop multi-cultural curricula in which cultural differences are preserved and also a tolerance is developed among all for cultural differences (McInerney, 1987). The reason why affective content of the curriculum got deleted in favour of cognitive content is that cognitive objectives are stated clearly while the affective objective are supposed to be implicit in the curricular framework. Frequently referred to as hidden or latent curriculum first treated as such by Overly (1970); its implementation remains at the mercy of the teacher's own attitudes and values (Rao, 1988). Pedersen, et al. (1978) examined the influence of class teachers on

children's later adult status and found that I.Q. changes by the first grade teacher more than by the later teachers.

London School Council's Practical curriculum (1981) sets out the broad aims that could become the guiding principles for formulating curriculum anywhere in the world: "School should help their pupils to know and remember, and to feel, to be capable, to understand and value..... Preparation for adult life required a curriculum which includes moral education as well as political and economic understanding." Human nature and contemporary society requires a curriculum which nurtures aural and visual as well as verbal skills. The challenge is to blend aims and process in an effective, broad and largely common curriculum".

The above opening statement communicates the concerns of the curriculum designer for not simply producing scholars who are adequate in understanding, discriminating and decision making in human fields but also prepares the children to have some hold on their personal life and their relationships as an adult.

The curriculum needs to be designed keeping in view the affective learning needs of the children along with the cognitive needs. The curriculum that takes care of the scholastic development of the child will have to provide for:

1. Highly motivating learning experiences for students of all abilities.

2. A thorough grounding in practice of basic skills, including practical ability, and social skills.
3. Broad orientation courses which relate students to all aspects of the human situation and help develop a sense of involvement in the affairs of mankind, past, present, local and global, as well as providing opportunities for cooperation, planning and decision making.
4. Opportunities for wide range of creative and aesthetic experiences and pursuits.
5. Courses directed to the attainment of total health: Physical, personal, social and moral.
6. Opportunities for individualised study designed to foster the growth of personal interests and aptitudes, as well as the experiences of dedication and application (Hemming, 1984., p.315):

The curriculum tends to provide the knowledge of various subjects in the form of separate subject areas but Hargreaves (1982) says these subject divisions are out of date. The curriculum should be able to provide to the pupil's a broad perspective on over-all human situation. A little arousal of their interest in this area is likely to go a long way in creating awareness among them about society

and humanity, as human beings are curious by nature (Hodgkin, 1976).

Some other aspects that are to be taken care of in the curriculum are need for fostering creativity and aesthetic sense. The curriculum has to include a generous component of aesthetic and creative experiences so as to help develop the intuitive and creative brain along with the analytical-logical brain (Sperry, 1973). Health education, environmental education are some of the areas which have to be paid not simply segmental attention but made a part and parcel of the school experiences in a realistic manner so that the students not only learn facts but think and feel about them so as to include them in their value system.

The individualised study also has to be evolved for the gifted so that while learning basic skills with their peers their additional energies may be free to progress fast (Peny 1982).

The curricular designers thus have to keep in mind the fact that each young person is unique in the interests, aptitudes and abilities he/she possesses. The curriculum should provide opportunities to each one

of them, chances to realise their potential. It has got to be diverse so that satisfaction for all is ensured. In order to attain this end the curriculum will have to be diverse as well as relevant to their own lives.

The information and knowledge based curriculum has also to be broken down in such way that each unit could be readily mastered thus ensuring success experience for each pupil (Becker et al. 1981). The skills so learnt should be put to use so that mastery of skills may itself become reinforcement. Thus organizing the learning experiences fruitfully could lead to development of self esteem and self-worth.

Listening and talking i.e. communication skills **form** the most essential component in about fifty percent jobs (Hamming, 1984). It is also essential for private life but is there any attention given to inculcate this skill in pupils? We encourage students to express their feelings and emotions in constructive ways. According to Watts (1980) schools should teach social skills: necessary for modern life-whether in or out of employment- by specific activities in the classroom and also put to use in day to day life of school. Thus the curriculum has to be multi-dimensional and encompass the basic experiences that each child needs for affective and

fruitful living as an adult and also provide for development of his special talents.

Modification of the entire educational system, with the end of holistic development of child in mind, is required urgently if society has to become value based, if the peace and harmony are to be realised, if the child is to be happy and joyous now-while in the educational process-and ever. Affective development has got to be ensured so that all children with their unique pattern of interests, abilities and motivation may be able to progress according to their capacities and grow into mentally healthy and adjusted adults.

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R E F E R E N C E S

- Ashondedn, D., Blackburn, I., Hannan, W., and White, D. (1984)
The democratic curriculum. The Australian Teacher,
7, 13-20.
- Govt. of India; Ministry of Education and Culture (1983)
Report of the Working group to review Teacher
Training Programmers, New Delhi
- Hemming, J.; (1984) Curriculum for what? In Skilbeck, M. (Ed.)
Readings in school based curriculum development;
London: ~~Harper~~ & Row.
- Kicklighter, R.H. (1975) Psychological Education in the
Elementary School, Boston: Houghton Mafflin Company
- McInerney, D.M.; (1987) Teachers attitude to Multicultural
Curriculum Development . Australian Journal of
Education, (31) 129-144
- Rao, V, (1988) The hidden curriculum. Progressive Educational
Herald: Vol. (2) No. 4., 85-87.
- Raven, J (1987) Values, diversity and cognitive development,
Teacher College Record 89 (1) 2 .
- Saligman, M.E.P (1975) Helplessness on Depression, Development
and Death. San Francisco: Freeman.
- Peterson C., and Seligman, M.E.P (1983) Learned helplessness
and victimization. Journal of Social Issues, 39(2)
103 - 116.

NATIONAL SYMPOSIUM

TITLE OF PAPER: OVER VIEW OF CHILD-CENTRED EDUCATION:
THE UNDERLYING PRINCIPLES AND PEDAGOGY
AND A PROGRAMME OF ACTION

M.P.Chhaya*

The National Policy on Education (NPE - 86) has recognised that 'a human being is a positive asset and a precious national resource which needs to be cherished, nurtured and developed with tenderness and care, coupled with dynamism'. The policy also mentions that 'each individual's growth presents a different range of problems and requirements, at every stage - from the womb to tomb'. An individual's individuality and dignity should be respected, and his needs, interests, aptitudes and abilities taken into account by the educational system.

To educate the coming generation who will have the competency to tackle its problems creatively, with confidence and determination and with a commitment to human values and to social justice, the policy has advocated a child-centred and activity-based process of learning.

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The center of gravity in old approach is outside the child. It is in the teacher, the textbook, syllabus, anywhere and everywhere but not in the child. Now the change which is coming into education is the shifting of the center of gravity to the child. When we talk about child-centred education, it is a fundamental assumption that learning should have 'meaning' for the child. The learner comes to possess what he knows. The learner must know how to do something with his knowledge. The utilization of knowledge will often occur in subsequent learning situations within the school itself, and the competences acquired by the child will often be the skilled use of concepts, facts and principles as well as the mastery of motor skills. The learner should practise them for himself. Learning by doing is essential to the acquisition of knowledge as a personal possession.

Education for life should offer competencies and disciplines whose power informs the whole of life. What the child knows ought not to be particular to the situation in which it was learned but transferable to novel situations.

The schooling of the child should be related to his own experience, to his weaknesses as well as his strengths.

Child-centred learning would be a good motivation for the child to attend school and learn. The child-centred approach means that there should be a shift in emphasis from the teaching process to the 'learning process'. The focus should be on developing the skills of 'learning to learn'. This skill will enable the students to learn on their own and be able to face the demands and challenges of the ever-increasing flow of knowledge.

The overall goal of education should be the "all round development" of the child. In other words it is the 'integrated development' of the child.

Mahatma Gandhi defined education as the all-round drawing out of the child-body, mind and spirit.

The curriculum for the child-centred approach for the all round development of the child should cover all aspects of development - physical, mental, social, emotional aesthetics, moral and spiritual.

Child Centred Curriculum :

It is to be based upon the needs, interests, aptitudes and abilities of students at different levels so that it enables the learners to acquire the necessary skills, knowledge, attitudes and values which will help him realise his full potential. The overall goal of education should be the all-round development of the child and not only that of acquiring knowledge, drawing out of the best in child-body, mind & spirit.

Curriculum should cover all aspects - knowledge, skills, attitudes, physical health, moral & spiritual values, aesthetics & work experience.

By 'Discovering for themselves' the children's skills of observation & analysis are sharpened and they can apply these skills to many more situations and thus expand their knowledge.

Focus will not be on memorisation of facts but on development of competencies in all aspects of child development. Suitable modules are to be developed according to the individual's potentialities, needs, growth and development, interests and aptitudes, aspirations and personality characteristics.

Curriculum and methodologies of learning should bring in elements of problem solving, creativity and relevance. It should also assist students to gain knowledge of the subjects and to utilize this knowledge gained in new situations. Through this curriculum he should be able to extend or refine his skills and gain new interests and attitudes.

The main thrust in this curriculum should be to promote individual integrated development of:

- (i) Knowledge, skills, values and attitudes conducive to the actualisation of his/her potentialities to the fullest in order to enhance his/her capacity for a productive and happy life as a person, as a responsible citizen and as a worker;
- (ii) Vocational skills necessary for increased productivity and well-being, inculcation of dignity of manual labour, willingness to work hard and entrepreneurship;
- (iii) An understanding of the diverse cultural and social systems of people living in different parts of the country and the country's composite cultural heritage;

- (iv) A readiness to preserve the good aspects of the cultural traditions and heritage alongwith an awareness of the need to reinterpret and re-evaluate the past to adapt to the new practices and outlook appropriate for a modern society;
- (v) An awareness of the inherent equality of all, alongwith a strong commitment to human values and social justice;
- (vi) Scientific attitude and rational outlook, knowledge of the procedures involved in scientific method of inquiry and its use in solving problems;
- (vii) An understanding of the environment and its limited resources and an awareness of the impact of population growth on resources and the need for conservation of nature, natural resources and energy;
- (viii) The will and determination to uphold the ideals of national identity and unity;
- (ix) Values of compassion and non-violence as a world view and an instrument for the welfare of the human race;
- (x) Capabilities of appreciating and tolerating differences and diversities and the capacity to choose between alternate value system;
- (xi) Aesthetic perception and creativity through participation in different artistic activities;

- (xii) Physical fitness and strength in conformity with normal development patterns;
- (xiii) Pre-requisites and habits necessary for self-learning and for life-long learning leading to the creation of a learning society;
- (xiv) Capability to internalise new ideas constantly and creatively and readiness to cope with rapid scientific and technological transformation.

The effective implementation of these educational strategies to develop the potential in the child will depend, to a great extent, on the nature of interactions that take place during the process of transacting the curriculum in a school system between the student and the teacher, teachers and educational administrators, and policy makers.

The Role of the Teacher:

The role of the teachers in child-centred approach will be that of a 'facilitator or guide' who should be able to provide the right kind of learning experiences and environment to children, through active interaction, to develop the basic skill of observation, collection of information and drawing of inferences and conclusions to enable them to learn of their own.

The teacher has an important role in promoting other than intellectual aspects of development in his students. To foster social development of children, the teacher should plan activities for students which will make them learn to work and play together to foster the spirit of sharing and cooperation. The teacher's positive attitude towards the children would encourage / ^{the} emotional aspect and motivate them to / ^{further} achievements.

He has to motivate his students and participate in the classroom activities with the students. When group interaction becomes charged with emotion, he has to maintain a neutral and understanding role. He has to stimulate curiosity and independent thinking. He has also to develop problem-solving skills, promote planning and execution of projects. The teacher should make sure that every student in the class has attained the prescribed 'essential learning outcomes' for all the subjects. He has also to focus on 'development of competencies' in regard to all aspects of child development.

EVALUATION

The evaluation will have to be done in terms of attainment of competencies rather than of knowledge. Evaluation will cover all areas of development - knowledge, skills and competencies, social and emotional development, physical & moral development as well as work experience. It should be comprehensive and continuous. The periodic evaluation should also include a qualitative assessment of dimensions like sociability, leadership, ability to work with others, self confidence etc. It should also mention the child's positive strengths or attributes as well as problem areas if any.

Evaluation includes written tests, oral performance, observation techniques and use of cumulative records. It will be used to compare the child's performance with his own earlier performance.

Through continuous comprehensive evaluation, it is regularly possible to obtain valuable data about the strengths and weaknesses of the children. This is helpful in providing remedial and enriched instruction with a view to realising the professed objectives of education in the optimum growth and development of different aspects of child's personality. The feedback helps teachers in improving the level of achievement and proficiency among pupils. It provides

opportunities for teachers to make suitable changes in their efforts. It also provides direction to pupils and parents in their efforts. Feedback is available for remedial steps.

Programme of Action on the Integrated Development of the Child

The school climate is to be created by introducing various types of programmes to facilitate the all round development of the students in the weekly time table with the active participation of every student. Equal ^{are} opportunities to be offered to all the students. The suggestive school programme is given below:

In the day-school, there will be six days working with nine periods a day of 35 minutes duration with half an hour break. The total working time of the school in a day would be of 5 hrs 45 minutes. Even the government schools with double shifts would be able to work for 5 hrs 45 minutes daily. The allotment in the weekly time table would be as under:-

Intellectual development	33 periods	1 Lang.-6 periods, 2 Lang.-5 periods, 3 Lang.-4 periods, Math-6 periods, Soc. Studies-6 periods, Gen. Science-6 periods.
Physical Development	7 periods	Games-4 periods, PT-1 period, Yoga/NCC/Scout-2 periods
Emotional & Aesthetic	4 periods	House system-2 periods, fine arts-2 periods
Social development	4 periods	Skill-oriented-2 periods, Service oriented-2 periods
Moral & Characterual Dev.	6 periods	School assembly-20 min + cleanliness in school-15 minutes = 1 period daily = 6 periods weekly
TOTAL.	<u>54 periods</u>	

TITLE OF THE PAPER : PROBLEM OF SCHOOL DROP-OUTS-REASONS THEREOF.

- Dr. M.C. JAIN*

All the developing countries are facing a crisis

63 12 -

DETAILS OF INTEGRATED DEVELOPMENT PROGRAMME

<u>Intellectual Development</u>	<u>Physical Development</u>	<u>Aesthetic & Emotional Development</u>	<u>Social Development</u>
<p>Prog.: Activity/project based teaching in all subjects</p> <ul style="list-style-type: none"> - Around Actual Real Life situations - Teaching through Newspaper in Edu. - Environmental Edu. - Play way method - Teaching how to learn - Involvement of children in teaching-process - Investigatory approach to be used in teaching various subjects - Use of library while teaching. 	<p>Prog:-Team games: Cricket, Football, Hockey etc.</p> <ul style="list-style-type: none"> - Court games: Volley ball, Basket Ball, Throw ball, Kabbadi, Kho-kho etc. - Individual games: Badminton, Table Tennis, athletics, gymnastics, karate, Judo, Boxing etc. - P.T. - Yoga - NCC, Scout & Guides VI & VII - Yoga VIII & IX-NCC X Scouts & Guides XI & XII Social work 	<p>Prog:use system</p> <ul style="list-style-type: none"> - Comprehension & Communication Dev.: Debates, recitation, declamation, Quiz, word building etc. - Cultural & aesthetic Dev. Music, dance, painting, clay modelling, Dramatics, Band, celebrations of religious, national & cultural festivals - Leadership Dev. Class monitorship House captainship School prefectship School Parliament 	<p>Prog.: S</p> <ul style="list-style-type: none"> - Various like ele carpenter batik, commerce tailoring book binding - Service activities Shramd= cleaning service assist: departu library canteen

644

- 13 -

Aesthetic & Emotional
Development

Social Development

Moral & Spiritual
Development

Time allotment

Time allotment

Time allotment

House system-2 periods

SUPW - 4 periods

1 period every day

Fine arts-2 periods

6 periods

Total - 4 periods

TITLE OF THE PAPER : PROBLEM OF SCHOOL DROP-OUTS-REASONS
THEREOF.

- Dr.M.C. JAIN*

All the developing countries are facing a crisis in their educational system with problem of school dropouts at the school level in general and primary level in particular. To combat this problem which is common in almost all such countries various steps have been initiated by these countries with varying degrees of success.

The principle that liberal education is the right of every individual is comparatively of recent origin. Even elementary liberal education was confined to a small class of upper social strata (about 1 to 5% of the children in the age group 5-15), mostly boys. For the remaining children, vocational education learnt in a non-formal manner through apprenticeship or active participation was considered adequate. At the beginning of the 20th Century; therefore, there were innumerable small elementary schools in almost all towns and villages, but they enrolled only between 1 to 5% of the children of school going age and the percentage of literacy among the adults was only about 3% and that too confined to men alone. The onlightened educated Indians like Dada Bhai Nauroji, Gopal Krishna Gokhale, saw the provision of universal

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liberal education in the advanced countries of the West and demanded compulsory education of four years for all children. The compulsory education act was passed providing 4 to 5 years of liberal education to all children in different states during 1918-1931.

When the country became free, the framers of our Constitution knew that society based on freedom, equality, justice and dignity of the individual cannot be created without literate and educated citizens. Accordingly in Article 45 they directed that the state should strive to provide free and compulsory education to all children till they attain the age of 14 years.

Since independence, there has been an impressive expansion of education at Primary, Secondary and Higher levels in India. This stands in sharp contrast to the chronic problems of : (a) Quality and equality of opportunity both at school and college levels (b) wastage and stagnation at all levels, particularly at the primary level and (c) unemployment of the educated.

In India the problem of educational wastage first came to the fore with the Hartog Committee's Report in 1928 which remarked that 'Throughout the whole educational system there is waste and ineffectiveness! But no sustained efforts

were made by the then Government either to arrest the situation or reduce the wastage and stagnation. The first ever study in this area seems to have been made in the beginning of 1940s when a report on stagnation and wastage in primary schools was brought out by the Bombay Provincial Board of Primary Education in the erstwhile Bombay Province. Since then several institutions and individuals have made studies in the area, identifying the extent and causes of wastage and stagnation and suggested some remedial measures. These studies however, were confined to either their own province/state, certain regions within a state or even a district within a state.

In fact the problem of school dropouts in our educational system has received much attention during the last forty years. It has been discussed thoroughly at national level and yet there have not been any action programmes for the reduction of this evil. This problem has three aspects :

The first is that school dropout is the result of weak and defective educational system. The ultimate solution lies in making the educational system strong and effective. The essential conditions for the attainment of this goal are better educated and trained teachers, provision of improved facilities in schools, improved curricula, adoption of modern and dynamic methods of teaching and evaluation, adequate provision of

essential materials for teaching learning processes, full utilization of all possible resources and better supervision and guidance.

The second aspect is to bring about changes in the educational system to suit the life and needs of people who are entering the school for the first time. How does elementary education help a rural child or the child of an agriculturist to become a better or more useful citizen? Hence arises the need to differentiate the curriculum of the rural school from that of the urban and to make rural school conform closely to its own environment.

The third is, that in every given situation in an educational institution and even at the existing level of facilities, it is also possible to reduce the extent of wastage and stagnation to a great extent through proper planning and through maximum utilization of facilities available and creation of an atmosphere of hard, sustained and dedicated work.

There are four essential requirements of every child i.e. food, shelter, clothing and education. The Indian Constitution provides for free, compulsory and universal primary education for every child till the age of 14 years. Since India became independent, great efforts have been made in this direction. However, due to the magnitude of the work and great resources involved the constitutional obligation has not

been fulfilled so far. Therefore, to provide free and compulsory education up to the age of 14 years a two phased programme is underway. In the first phase, free and compulsory education is proposed to be provided to all children from 6 to 11 years of age and in the second phase such education will be provided to all children till they reach the age of 14 years.

For achieving these goals, it is essential that

- (1) Every child by the prescribed age of 6 years should be enrolled in class I.
- (2) Every child who is enrolled in class I should complete one class in a year till he reaches the end of the primary stage or completes the age of 11 years.

In the forty years of independence we have made considerable progress in this regard. Our best achievement is the provision of facilities of a primary school within walking distance from the homes of nearly 97% of the children. More than half of the children also have a middle school (class VI-VIII) within easy distance of their homes. Anyway, it does not appear difficult to provide a school for classes I-VIII within walking distance from the home of every child and the goal may be reached in 5 to 10 years. Even in the matter of enrolment of children, we have made considerable headway. The total enrolment in classes I-V is now 78 million

and that in classes VI-VIII is about 20 million. It may also be said that about 86 children out of every hundred enter schools at present.

Our failures are however also glaring. Unfortunately, our greatest weakness is that among every 100 children in schools, only 50 reach class V, and only 25 reach class VIII. In other words, our education is somewhat effective for half of the children and fully effective for one fourth. This huge wastage makes our educational system most inefficient. There is little scope of fulfilling the directive of the Article 45 of the Constitution in the near future. This was to have been fulfilled by 1960; the target date was revised to 1966, then to 1976 and then to 1986. But even that has not been achieved.

Much discussion has taken place about ways of improving the educational system, and many plans, such as suitable curricula, accelerated courses, and more efficient methods of teaching have been instituted. Valuable as such measures are, any educational system however excellent, can only provide the means by which a child may be educated- it cannot insure that a child will take advantage of what is offered.

There may be a large number of reasons for our failures. Some of the well known and commonly talked about are sudden and large increase in population, lack of resources, our single point of entry in elementary education, non-involvement of the

pupil, slackening of efforts on the part of the Government and giving low priority to education in their plans. Some of the basic reasons which are directly connected and responsible for these burning problems are :

Poverty :

Pupils studying in schools cannot afford to continue their studies because of the poverty of their parents. They have no resources to meet the educational needs of the children like books, stationery etc. This is an important single factor.

Taking up odd jobs to supplement income :

Boys are forced by circumstances to leave the school and take up unskilled jobs to supplement the income of their families.

Involvement of children in domestic work :

Children are involved in all types of domestic work as soon as they are old enough to work. This practically leaves them no time for study and hence to their leaving the school before completing the course.

Educational Background :

Family members having no educational background, have no perception of value of education and hence

are not serious about the education of their children. Some of them even have a negative attitude towards education.

5. Caste :

Parents belonging to scheduled castes and backward classes, also being illiterate, are not serious and enthusiastic about giving education to their children.

6. Occupation :

People engaged in agriculture and casual labour are generally not in favour of sending their children to school as they need more hands to supplement income of family as compared to those engaged in business and paid types of employment.

7. Indifference of Parents :

Due to poverty, illiteracy, and cultural deprivation the parents very often become indifferent towards the education of their children. This leads to wastage in Education.

8. Continued presence in one class for more than one year :

The longer the child remains in one class the more neglected and discouraged he feels. He does not benefit by over stay in the same class : it rather inadvertently affects adversely the teaching and performance of other pupils.

9. Poor Quality of Teaching :

Poor quality of teaching is a major factor for the drop out problem. Disgruntled teachers, having no aptitude for teaching, lack required earnestness for good teaching resulting in educational wastage. ^{Such teachers} are continuously ~~being~~ ^{recruited} trained in training colleges and later on/in the teaching profession.

10. Lack of proper environment at Home :

In some homes the environment is not conducive for studies. Due to certain mishaps in the family or due to poverty or sickness of the parents, the child is not able to continue his studies in school.

11. Education system not according to the needs of society :

The educational system should be so adjusted that school going children are able to assist their parents and also study at school. This can reduce wastage due to economic factors.

12. Faulty admission policy :

The admission policy of keeping admission open to grade I throughout the year leads to wastage, though technically speaking, it is not correct...to put the pupil who is admitted in the fag end of the session in the failure list.

13. Proper school environment :

Many of the schools have unattractive buildings, inadequate equipments, untrained and unwilling teachers to teach, overcrowded classes and so on. All this constitutes poor school environment. At present most of the schools do not have proper facilities and the average child is not normally inclined to remain there. Consequently the affected parent withdraws him from school.

14. Death of parents :

The child may have to bear the responsibility of a bread earner too early due to the death of the father and hence leaves the school abruptly.

15. Irregular attendance :

There may be irregular attendance of a child due to serious emotional distress, lack of interest in education, ill health, undesirable company etc. This is also an important factor for stagnation, ultimately resulting in criminal wastages of time, energy and resources.

16. Undernourishment of the pupils :

Because of economic backwardness, a large number of school children are undernourished and they therefore very often contract distressing diseases of

different kinds. Continuous illness of children adversely affects their achievement in studies and ultimately they become dropouts.

17. Heterogeneity in age in the composition of students in a classroom situation :

The students much older age, than the average age of the students in a specific class are more likely to dropout because of obvious reasons.

18. Emotional problems of the pupils :

Some pupils who show rude behaviour towards teachers and peer group are problem cases. Truancy, shyness, Excessive aggressiveness, anxiety, fear and insecurity are sure indications of maladjustment and are thus responsible for colossal dropout.

19. Social maladjustment of pupils :

This is due to caste inferiority, acute poverty of parents, undesirable social influences, physical stature being above or below the average of the class.

20. Mental retardation :

Poor academic performance due to low grasping power, lack of general responsiveness and lack of interest in studies show mental backwardness of a pupil and may lead to his dropout.

Apart from the above mentioned causes some other causes like physical defects, parents attitude towards school, teachers education, family atmosphere, institutional factors like heavy syllabus, lack of co-curricular activities etc. are directly responsible for this burning problem.

Numerous educational studies have made it evident that school dropout is a complex problem to which there is no simple solution. But from these studies a highly significant inference can be drawn : rarely do children, who are successful in school, leave prior to graduation. The high school drop-out is usually a child who has failed in his overall school adjustment. This failure is not necessarily a matter of a specific learning disability but rather a broader "educational" disability.

Many previous reports have strongly implied that dropout is an escape mechanism rather than a positive attempt at constructive action. Frequently, the student did express a wish to go to work, but very often this was a rationalization - an attempt to conceal from others, and perhaps from himself, his need to avoid school. High schools have been active in approaching the drop-out problem by remedial measures suitable to the school setting. Through such means as curriculum flexibility, vocational guidance, work experience programs, and some forms of in-school counselling, they have assisted many youngsters to remain in. However, there are still children who, against their own best interests, either

voluntarily leave school or have such difficulties that they are asked to leave. These children, whom the schools could not help, are driven to this self-defeating behaviour.

As a result of various studies conducted in the area and the causes identified, several remedial measures were initiated in the post-Independence era, both administrative and academic. Some of the measures initiated included mid-day meals programme, free supply of textbooks, free clothing, attendance-incentives and free-ships and scholarships to socially and economically deprived and backward classes. This served the dual purpose of not only bringing children to the school to fulfil Article 45 of free and compulsory education to all children up to the age of 14 years but also in retaining the children in the school, thus minimising drop-out from the school before completion of the full duration of the course. On the academic side programmes like ungraded school system, multiple class entry, remedial teaching for the academically weak children were introduced. and inspection and supervision was strengthened to provide guidance to teachers in the methods of teaching weak children as also ways of retaining children in the school.

In short, the element of compulsory and free education cannot be a source of satisfaction unless the compulsory system leads to a higher percentage of enrolment and attendance and better flow of promotion from class to class so that literacy is reached by much larger number of scholars.

TITLE OF PAPER: "CHILD CENTRED EDUCATION - ENVIRONMENTAL APPROACH"

Z.S.Chhikara*

In the New Education Policy, there is a shift in emphasis from teaching to learning. The child should be in the centre of all activities. Environmental approach involves a child, in activities that are based upon his observation and investigation of the surrounding with which he is familiar.

The Conservation Society, Chertsey(1972) has given the following objectives of environmental education at the elementary stage :-

- (a) It provides assistance to acquire and progressively develop basic skills and concepts.
- (b) To provide a source and stimulus for creative work.
- (c) To give opportunities for making discoveries at first hand.

This approach should further lead to the development of an awareness of personal environmental responsibilities.

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Charles Mellowes has spelled out the following objectives of Environmental Studies to meet the overall aim of progressively developing a sense of concern for the environment.

- (i) To introduce a child to the elements of school and home environments.
- (ii) Towards the end of the stage(Primary) a scientific approach be introduced to the child's surroundings.

The Young People and the Environment Group in England has suggested certain aims and objectives to be achieved at the elementary stage. According to this group, all things within sight, sound and reach is the environment of the child and therefore, it includes home, classroom, playground, bricks, floor, table, chair etc. The influence of the objects depends upon its closeness. The child has strong drive to explore and therefore, he should be encouraged to become involved in environmental observation and exploration with the help of all the senses-sight, sound, touch, taste and smell. Also his experiences will be broadened and deepened through creative activities such as talking, painting, modelling, music, movement, drama and writing.

In the early years, the child's range of interest is to be broadened. He is to be provided with the opportunity of collecting things, to help him to develop his communicating skills and awareness of the qualities of shape and pattern and of inter-relationship. If he develops the habit of looking beneath the surface of things, asking why they and how they are changing, it shows that a proper foundation has been laid for development.

child
At this stage, the/starts to mix socially and develop attitudes of behaviour through his experiences of acceptance, approval or disapproval by others. Thus the foundations of a concern for the community and for his surroundings, and a sensitive caring outlook towards all living things can be laid.

For the development of language, vocabulary and conversation new words and phrases which can be understood and used by the child will be introduced while exploring and describing surroundings.

According to the report by H.M. Inspectors of Schools, Scottish Education Department, viz 'Environmental Education', The child is constantly acquiring knowledge of his environment and he is helped to acquire skills and even to develop

attitudes towards his environment. Training in looking, listening, touching and recording is given. The environment provides the school with much teaching material - flowers, trees, birds, streets, traffic, occupation, building and people. Visits to farm, factory, park, museum and historical buildings or a country walk or an excursion to a town, provide many varied learning situation. In the upper years of the elementary school, knowledge of the environment begins to be classified and simple concepts can be introduced.

From this discussion, it can be concluded that the Environmental Studies has two-fold aim i.e. arousing and developing the child's desire to know more about his world and aiding him in the development of the skills he needs to interpret it. Therefore, accurate description and interpretation of the environment is possible only with the help of certain skills which have already been discussed in general. These skills at the elementary stage mainly fall under three broad groups :-

- I. Basic Skills: Language and mathematics are considered as basic skills since, they are essential for all the studies.

- II. Study Skills: These skills include mapping, collecting, classification, experimenting, preparing interviews and questionnaires, reading of photographs and documents.
- III. Social Skills: Involve social conduct in groups, attitudes towards people, respect for the quality of the environment, etc.

Some of the important skills that are expected to be developed in an Environmental Studies Programme are briefly discussed here along with activities that assist in their development.

1. Language: Language is one of the most important means of communicating as at all stages and with all children, accurate use of the language is essential for the Environmental Studies. A child normally makes use of language in three ways.

- (a) Oral discussion: The child gives accounts of the journeys he undertakes, people he meets, things he sees, description of the ways of finding out, etc.
- (b) Factual writing: Written accounts of journeys, way to a party, letter writing, material derived from reference books, etc. are regularly undertaken by the child.

- (c) Creative(Imaginative) writing: The child may undertake sensitive imaginative writing as a reaction to exciting and stimulating events. He gets these first-hand experiences at home, in the streets, in school, on some excursion etc.

Environmental studies is not the sole approach to language but it helps in its development as the child comes across and learns new words, phrases, and vocabulary and as he is required to express orally and in writing.

2. Mathematics: In environmental studies, mathematics is regarded as one of the tools through which accurate observation, analysis, and interpretation may be undertaken. The child experiences measuring of height, weight, length, shapes of articles(rough, smooth, round) use of graph, etc. In this way the mathematical concepts developed by other methods are reinforced in the child.
3. Mapping: The objective is that the child learns the use of title, scale, key, direction etc. which are essential for a map. Plans of rooms, houses and school, designing room arrangements, showing the path from home to the school, etc. are undertaken to develop this skill.

4. Experimentation: Accurate observation, recording, classification, interpretation and generalisation are essential for any scientific investigation. Classification of different categories of houses - detached, terraced, single storeyed, multi storeyed, testing the qualities of the materials used - hardness, texture, weight etc. are some of the activities involving these skills.
5. Drawing, modelling and pictorial representations: Direct experiences of form, colour, texture, and movement of the world around the child may evoke a desire to express his reactions in pictorial forms. Sensitive water colours used for patterns on pottery or cloth, design for book cover etc. are frequent developments. The child can draw things like, 'My House', 'A Street Scene', 'A Policeman', etc. from his environment. He can make models of local houses, cards, furniture etc.

To express through graphs and models is called the 20th century skill. The child ought to learn picture graph, block graph, line and curve graphic, pie-graph etc. alongwith their interpretation.

6. Questionnaire and Interview: The child prepares his own simple questionnaire and interviews to collect information about the environment. The questions should be short, simple, relevant and clear. Tape-recorders should be made available to children whenever possible for taking the interviews. They learn how to use it. They can prepare questionnaires and questions to interview the members of their families, Principal, Teachers, peon, gardner, their colleagues and friends.

The social skills of cooperation and respect for others and their opinions and the values, attitudes and habits essential for preserving and improving environmental quality are developed through activities such as field trips, caring the pets and plants, cleaning the class-room and play-grounds, involvement in planning and decision making etc.

All these skills are inter-connected and therefore any individual skill cannot be developed in isolation. Therefore, opportunities must be made available and activities undertaken from the environment of the child for the development and reinforcement of these skills in the Environmental Studies programme.

TITLE OF PAPER : CHILD-CENTRED EDUCATION - ROLE OF
PSYCHOLOGICAL TESTING, GUIDANCE AND
COUNSELLING

V.K.Jain*

Considering the central theme of the National Symposium, it is very essential that we should converge our attention to a very important aspect of a child viz. his global potentialities, capabilities and personality qualities. Unless we have a complete profile of the child before us it will be impossible to give him any form of guidance in the areas of academic achievement, personality development, overall growth and social adjustment. The role of psychological testing in the assessment of the 'gestalt' profile of a child cannot be denied even in a Socialist country like Soviet Union.

It will be interesting to know that the four best schools in the world for gifted children are located in the Soviet Union. What more proof do we require to recognise the fact related to psychology of individual differences?

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It is a known fact that children differ in their total potentials and each one of them has his 'best'. According to the father of the Nation, Mahatma Gandhi, the chief purpose of education is to draw out the best available in each child. If this is so, how can we deny the fact that this 'best' in each child should be assessed properly before providing him the relevant type of education, guidance and counselling.

Evidently we have to take the help of the standardised, valid and reliable psychological tests which can determine the capabilities and personality qualities of children in a reliable form. There are millions of standardised tests available in the world and thousands of standardised tests available in our country which can help us to know the total capabilities of children. We can make use of these tests in the areas of intellectual accumen, personality qualities, interests, aptitudes, attitudes and scholastic achievement. In fact, with the use of such tests, complete and reliable profile of each child can be prepared with ease and utmost validity.

There are a number of available psychological tests which can be administered in urban and rural areas equally well because these tests are non-verbal in nature. There

is not much use of language and hence communication can be established with effectiveness and the assessment of the potentials can be done without any difficulty or social handicap.

Some examples of such tests are Progressive Matrices, DAT Battery of Tests, Bhatia's Battery, Bannet Mechanical Comprehension Tests, Minnesota Paper Form Board Test; etc. These tests have been applied all over the world on privileged and non-privileged categories of children and have been found to be sufficiently valid and reliable. There is a word of caution that these tests alongwith other tests should be applied not for 100% predictive value but should be utilized to have a tentative profile of the intellectual potentials and other dimensions of children. Similarly, there are a number of tests of a non-verbal nature which are available in the personality domain. Interest Inventories and Aptitude Tests can also be similarly designed to suit the rural and urban populations like the ones used in the National Talent Search Selection and in the selection for admission to the Navodaya Vidyalayas.

After we had used the relevant psychological tests on different parameters; we can prepare a cumulative profile of each child and then use standardised norms to interpret the scores obtained on various tests.

This methodology can help us in knowing the 'best' available in each child so that we may provide him with relevant type of educational guidance, vocational guidance, career guidance and personal guidance at various cross roads of life. This will not only minimise the stagnation and wastage in the field of education, reduce the dropouts considerably but will certainly help the Nation in polarising children into those areas where they can fit in with efficiency, ease and according to their basic and acquired potentials.

The number of institutions, where psychological testing can be done with precision and guidance and counselling can be provided with determination and on a scientific pedestal are very few in number and this is our main hurdle and handicap. A number of such centres should be opened, preferably one in each district, for the purpose stated above. Only then we can be sure that children can be assessed properly and timely for their abilities and potentialities and thus be guided into

right type of educational and vocational channels. This is very necessary because of the mis-fits and failures that we come across in life where the adolescents and the youths take up educational and vocational careers which have nothing to do with their intellectual abilities, personality qualities, interests and aptitudes. Is it not a drain on the scarce human resource of the country? If the answer is in affirmative, the Nation should be vitally concerned with the urgent opening of such centres. The Bureau of Psychology, Allahabad did a very pioneering service to the National. There are a very limited number of such institutions available in the country today where the facility of scientific psychological testing; guidance and counselling is available on a personnal basis. We need hundreds of such bureaux centres all over the country in order to help the children in the right way at the right time and with the right procedure.

The National Policy of Education (1986) has undoubtedly emphasised the overall growth and development of children but it seems that it is silent on this specific issue. The Educationists, Psychologists, Educational Administrators, Educational Planners, Management Experts and Financial Experts should consider this issue in greater depth and with firm conviction so that the present chaos in the field of education, career choosing and later adjustment in the world of work is not left to the mercy of chance and unplanned decisions.

INDEX

Ahmed, Rais.....	89
Anand, S.P.....	251
Beg, M.A.....	321
Bhutani, Kamla.....	409
Chhaya, M.P.....	632
Chhikara, Z.S.....	657
Dhar, C.....	585
Dhar, T.N.....	147
Ganguly, B.....	486
Gulati, Sushma.....	127
Gupta, Nirmala.....	338
Hajela, P.D.....	473
Jain, M.C.....	644
Joneja, G.K.....	423
Joshi, M.C.....	514
Kapur, M.N.....	93
Kaur, Gunamrit.....	490
Khader, M.A.....	577
Mathur, R.K.....	10
Mehdi, Baqer.....	184

Mohan, Swadesh.....	32
Narain, Iqbal.....	114
Neshla.....	199
Pai, Anant.....	301
Pande, C.G.....	172
Pant, Daya.....	611
Phalachandra, B.....	362
Saraswat, R.K.....	390
Sen, Anima.....	262
Shanmugam, T.E.....	460
Sharma, R.K.....	593
Singh, A.K.....	62
Singh, Pritam.....	373
Srivastava, A.B.L.....	231
Srivastava, R.P.....	216
Tewari, Naren.....	558
Vaidya, N.....	440
Verma, Amita.....	498
Venkatasubramanian, K.....	1
V.K.Jain.....	665

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